

# CX-JD5

## SERVICE MANUAL

Ver 1.0 2003.08

AEP Model  
E Model  
Australian Model



- CX-JD5 is the amplifier, DVD player, tape deck and tuner section in JAX-D5.

This system incorporates Dolby\* Digital, Dolby Pro Logic (II) adaptive matrix surround decoder, and the DTS\*\* Digital Surround System.

\* Manufactured under license from Dolby Laboratories.  
“Dolby”, “Pro Logic” and the double-D symbol are trademarks of Dolby Laboratories.

\*\* Manufactured under license from Digital Theater Systems, Inc. “DTS” and “DTS Digital Surround” are registered trademarks of Digital Theater Systems, Inc.

US and foreign patents licensed from Dolby Laboratories.

|                   |                                    |                     |
|-------------------|------------------------------------|---------------------|
| DVD Section       | Model Name Using Similar Mechanism | NEW                 |
|                   | DVD Mechanism Type                 | CDM74-DVBU23        |
|                   | Optical Traverse Unit Name         | DBU-1               |
| Tape deck Section | Model Name Using Similar Mechanism | NEW                 |
|                   | Tape Transport Mechanism Type      | CWM43FR16/CWM43FR26 |

### SPECIFICATIONS

#### Amplifier section

The following measured at AC 120, 127, 220, 240 V, 50/60 Hz

Rated Power Output at Stereo mode

Continuous RMS power output (reference)

Front speaker: 90 + 90 watts  
(6 ohms at 1 kHz, 10% THD)

Center speaker: 30 watts (8 ohms at 1 kHz, 10% THD)

Surround speaker: 30 watts  
(8 ohms at 1 kHz, 10% THD)

#### Inputs

MD/VIDEO (AUDIO) IN (phono jacks):  
voltage 450/250 mV,  
impedance 47 kilohms  
MIC (phone jack):  
sensitivity 1 mV,  
impedance 10 kilohms

#### Outputs

MD/VIDEO (AUDIO) OUT (phono jacks):  
voltage 250 mV,  
impedance 1 kilohm

VIDEO OUT (phono jack):

max. output level  
1 Vp-p, unbalanced, Sync  
negative, load impedance  
75 ohms

S-VIDEO OUT (4-pin/mini-DIN jack):

Y: 1 Vp-p, unbalanced,  
Sync negative,  
C: 0.286 Vp-p, load  
impedance 75 ohms

COMPONENT VIDEO OUT:

Y: 1 Vp-p, 75 ohms  
Pb, Pr: 0.7 Vp-p, 75 ohms

PHONES (stereo mini jack):

accepts headphones of  
8 ohms or more

Front speaker: Use only the supplied  
speaker SX-JD5

Surround speaker: Use only the supplied  
speaker SX-JD5R

Center speaker: Use only the supplied  
speaker SX-JD5C

SUB WOOFER OUT:  
voltage 1 V,  
impedance 1 kilohm

#### Disc player section

|                           |                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------|
| System                    | Compact disc and digital audio and video system                                                             |
| Laser                     | Semiconductor laser<br>(DVD: $\lambda=657$ nm,<br>CD: $\lambda=793$ nm)<br>Emission duration:<br>continuous |
| Frequency response        | DVD (PCM 48 kHz):<br>2 Hz – 22 kHz ( $\pm 1$ dB)<br>CD: 2 Hz – 20 kHz ( $\pm 1$ dB)                         |
| Video color system format | NTSC, PAL                                                                                                   |

#### Tape deck section

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| Recording system   | 4-track 2-channel stereo                                       |
| Frequency response | 40 – 13,000 Hz ( $\pm 3$ dB),<br>using Sony TYPE I<br>cassette |

– Continued on next page –

## DVD DECK RECEIVER

9-961-039-01

2003H05-1

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Sony Corporation

Home Audio Company

Published by Sony Engineering Corporation



Tuner section

|                                        |                                                                                                             |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------|
| FM stereo, FM/AM superheterodyne tuner |                                                                                                             |
| FM tuner section                       |                                                                                                             |
| Tuning range                           | 87.5 – 108.0 MHz                                                                                            |
| Antenna                                | FM lead antenna                                                                                             |
| Antenna terminals                      | 75 ohm unbalanced                                                                                           |
| Intermediate frequency                 | 10.7 MHz                                                                                                    |
| AM tuner section                       |                                                                                                             |
| Tuning range                           |                                                                                                             |
| Latin American models:                 | 530 – 1,710 kHz<br>(with the interval set at 10 kHz)<br>531 – 1,710 kHz<br>(with the interval set at 9 kHz) |
| Saudi Arabian model:                   | 531– 1,602 kHz (with the interval set at 9 kHz)                                                             |
| Other models:                          | 531 – 1,602 kHz (with the interval set at 9 kHz)<br>530 – 1,710 kHz (with the interval set at 10 kHz)       |
| Antenna                                | AM loop antenna                                                                                             |
| Antenna terminals                      | External antenna terminal                                                                                   |
| Intermediate frequency                 | 450 kHz                                                                                                     |

General

|                                  |                                                       |
|----------------------------------|-------------------------------------------------------|
| Power requirements               |                                                       |
| European model:                  | 230 V AC, 50/60 Hz                                    |
| Australian model:                | 230 – 240 V AC, 50/60 Hz                              |
| Saudi Arabian model:             | 120 – 127 V, 220 V or 230 – 240V AC, 50/60 Hz         |
| Adjustable with voltage selector |                                                       |
| Other models:                    | 120 V, 220 V or 230 – 240 V AC, 50/60 Hz              |
| Adjustable with voltage selector |                                                       |
| Power consumption                | 255 watts                                             |
|                                  | 0.4 watts (in Power Saving Mode, European Model Only) |
| Dimensions (w/h/d)               | Approx. 280 × 330 × 405 mm                            |
| Mass                             | Approx. 11.75 kg                                      |

Design and specifications are subject to change without notice.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

**CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

The following caution label is located inside the unit.

CLASS 1 LASER PRODUCT  
LUOKAN 1 LASER LAITE  
KLASS 1 LASER APPARAT

This appliance is classified as a CLASS 1 LASER product.

This label is located on the rear exterior.

The following caution label is located inside the apparatus.

**CAUTION** : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.

**ADVARSEL** : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

**VORSICHT** : UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET UND SICHERHEITSPERRRIEGELUNG ÜBERBRÜCKT, NICHT DEM STRAHL AUSSETZEN.

**VARO!** : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALT-TIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

**VARNING** : OSYNLIG LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

**ADVERSEL** : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.

**VIGYAZAT!** : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.  
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

**LF** : LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.  
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.  
Soldering irons using a temperature regulator should be set to about 350 °C.  
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity  
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder  
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## Playable discs

You can play back the following discs on this system. Other discs cannot be played back.

### List of playable discs

| Format of discs         | Disc logo                                                                         | Contents      |
|-------------------------|-----------------------------------------------------------------------------------|---------------|
| DVD VIDEOS              |  | Audio + Video |
| VIDEO CDs               |  | Audio + Video |
| Audio CDs               |  | Audio         |
| CD-R/CD-RW (audio data) |  | Audio         |

| Format of discs         | Disc logo                                                                         | Contents |
|-------------------------|-----------------------------------------------------------------------------------|----------|
| CD-R/CD-RW (MP3 files)  |  | Audio    |
| CD-R/CD-RW (JPEG files) |  | Video    |

The "DVD VIDEO" logo is a trademark.

### Region code of DVDs you can play on this system

Your system has a region code printed on the back of the unit and will only play DVDs labeled with identical region code.

DVDs labeled  will also be played on this system.

If you try to play any other DVD, the message "Playback prohibited by area limitations." will appear on the TV screen. Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.



 Region code

### Discs that this system cannot play

- CD-ROMs (except for extension ".MP3," ".JPG," or ".JPEG")
- CD-Rs/CD-RWs other than those recorded in the following formats:
  - music CD format
  - video CD format
  - MP3/JPEG format that conforms to ISO9660<sup>\*1</sup> Level 1/Level 2, Joliet or Multi Session<sup>\*2</sup>
- Data part of CD-Extras
- Super Audio CDs
- Progressive JPEG format files cannot be played on this system.

- DVD-RWs in VR mode (DVD-RWs created in VR (Video Recording) mode allow the contents to be programmed or edited.)
- DVD-ROMs
- DVD Audio discs
- A DVD with a different region code.
- Audio tracks in MP3PRO format.
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with paper or stickers on it.
- A disc that has the adhesive, cellophane tape, or a sticker still left on it.

<sup>\*1</sup> ISO9660 Format

The most common international standard for the logical format of files and folders on a CD-ROM. There are several specification levels. In Level 1, file names must be in the 8.3 format (no more than eight characters in the name, no more than three characters in the extension ".MP3" or ".JPG") and in capital letters. Folder names can be no longer than eight characters. There can be no more than eight nested folder levels. Level 2 specifications allow file names and folder names up to 31 characters long. Each folder can have up to 8 trees.

For Joliet in the expansion format (file and folder names can have up to 64 characters) make sure of the contents of the writing software, etc.

<sup>\*2</sup> Multi Session

This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

CD-Extra: This format records audio (audio CD data) on the tracks in session 1 and data on the tracks in session 2.

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## Notes on discs

- This system can play CD-R/CD-RW discs edited by the user. However, note that playback of some discs may not be possible depending on the recording device used for recording or the disc condition.
- Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the driver's characteristics.
- CD-R and CD-RW discs that have not been correctly finalized (processing to allow play by a normal CD player) cannot be played.
- CD-R and CD-RW discs recorded in multi-session that have not ended by "closing the session" are not supported.
- The system may be unable to play MP3/JPEG format files that do not have the extender ".MP3", ".JPG", or ".JPEG".
- Attempting to play non-MP3/JPEG format files that have the extender ".MP3", ".JPG", or ".JPEG" may result in noise or malfunction. Playback is possible up to 8 levels.
- With formats other than ISO9660 level 1 and 2, folder names or file names may not be displayed correctly.
- The following discs take a longer time to start playback.
  - a disc recorded with complicated tree structure.
  - a disc recorded in Multi Session.
  - a disc to which data can be added (non-finalized disc).
- Some CD-Rs, CD-RWs, DVD-Rs or DVD-RWs (in video mode) (DVD-RWs created in video mode have the same format as a DVD VIDEO) cannot be played on this system depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, the disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device.
- A disc recorded in packet write format cannot be played.

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## Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

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## Copyrights

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

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## Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

---

## Cautions when playing a disc that is recorded in Multi Session

- This system can play Multi Session CDs when an MP3 audio track is contained in the first session. Any subsequent MP3 audio tracks recorded in later sessions can also be played back.
- This system can play Multi Session CDs when a JPEG image file is contained in the first session. Any subsequent JPEG image files recorded in later sessions can also be played back.
- If audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

## TABLE OF CONTENTS

|                                                       |    |                                                        |     |
|-------------------------------------------------------|----|--------------------------------------------------------|-----|
| <b>1. SERVICING NOTES</b> .....                       | 6  | 6-29. Printed Wiring Board – FRONT AMP Section – ..... | 60  |
| <b>2. GENERAL</b>                                     |    | 6-30. Schematic Diagram – FRONT AMP Section – .....    | 61  |
| Location of Controls .....                            | 8  | 6-31. Printed Wiring Board                             |     |
|                                                       |    | – SURROUND AMP Section – .....                         | 62  |
| <b>3. DISASSEMBLY</b>                                 |    | 6-32. Schematic Diagram – SURROUND AMP Section – ....  | 63  |
| 3-1. Disassembly Flow .....                           | 9  | 6-33. Printed Wiring Boards – PANEL Section – .....    | 64  |
| 3-2. Steel Cabinet Case .....                         | 10 | 6-34. Schematic Diagram – PANEL Section – .....        | 65  |
| 3-3. Tray Panel .....                                 | 10 | 6-35. Printed Wiring Boards – KEY Section – .....      | 66  |
| 3-4. DVD Mechanism Deck (CDM74-DVBU23) .....          | 11 | 6-36. Schematic Diagram – KEY Section – .....          | 67  |
| 3-5. Front Panel Section .....                        | 11 | 6-37. Printed Wiring Board – VIDEO Section – .....     | 68  |
| 3-6. Mechanism Deck (CWM43FR16/CWM43FR26) .....       | 12 | 6-38. Schematic Diagram – VIDEO Section – .....        | 69  |
| 3-7. Back Panel Section .....                         | 12 | 6-39. Printed Wiring Board – TRANS Section – .....     | 70  |
| 3-8. MAIN Board Section .....                         | 13 | 6-40. Schematic Diagram – TRANS Section – .....        | 71  |
| 3-9. MAIN Board .....                                 | 13 | 6-41. Printed Wiring Board – SUB TRANS Section – ..... | 72  |
| 3-10. I-BASS Board .....                              | 14 | 6-42. Schematic Diagram – SUB TRANS Section – .....    | 73  |
| 3-11. FRONT AMP Board, SURROUND AMP Board .....       | 14 | 6-43. IC Pin Function Description .....                | 78  |
| 3-12. TRANS Board .....                               | 15 |                                                        |     |
| 3-13. MB03 Board .....                                | 15 | <b>7. EXPLODED VIEWS</b>                               |     |
| 3-14. VIDEO Board .....                               | 16 | 7-1. Case Section .....                                | 92  |
| 3-15. DRIVER Board, SW Board .....                    | 16 | 7-2. Front Panel Section-1 .....                       | 93  |
| 3-16. Table Assy .....                                | 17 | 7-3. Front Panel Section-2 .....                       | 94  |
| 3-17. MOTOR (TB) Board .....                          | 17 | 7-4. Front Panel Section-3 .....                       | 95  |
| 3-18. MOTOR (LD) Board .....                          | 18 | 7-5. Front Panel Section-4 .....                       | 96  |
| 3-19. RF Board .....                                  | 18 | 7-6. Chassis Section-1 .....                           | 97  |
| 3-20. Optical Traverse Unit (DBU-1) .....             | 19 | 7-7. Chassis Section-2 .....                           | 98  |
|                                                       |    | 7-8. DVD Mechanism Deck Section-1                      |     |
| <b>4. TEST MODE</b> .....                             | 20 | (CDM74-DVBU23) .....                                   | 99  |
| <b>5. ELECTRICAL ADJUSTMENTS</b> .....                | 30 | 7-9. DVD Mechanism Deck Section-2                      |     |
|                                                       |    | (CDM74-DVBU23) .....                                   | 100 |
| <b>6. DIAGRAMS</b>                                    |    | 7-10. DVD Mechanism Deck Section-3                     |     |
| 6-1. Block Diagram – DVD DSP (1/2) Section – .....    | 31 | (CDM74-DVBU23) .....                                   | 101 |
| 6-2. Block Diagram – DVD DSP (2/2) Section – .....    | 32 | 7-11. DVD Mechanism Deck Section-4                     |     |
| 6-3. Block Diagram – TUNER/TAPE DECK Section – .....  | 33 | (CDM74-DVBU23) .....                                   | 102 |
| 6-4. Block Diagram – MAIN Section – .....             | 34 |                                                        |     |
| 6-5. Block Diagram – AMP Section – .....              | 35 | <b>8. ELECTRICAL PARTS LIST</b> .....                  | 103 |
| 6-6. Block Diagram                                    |    |                                                        |     |
| – DISPLAY/POWER SUPPLY Section – .....                | 36 |                                                        |     |
| 6-7. Note for Printed Wiring Boards                   |    |                                                        |     |
| and Schematic Diagrams .....                          | 37 |                                                        |     |
| 6-8. Printed Wiring Board – RF Section – .....        | 38 |                                                        |     |
| 6-9. Schematic Diagram – RF Section – .....           | 39 |                                                        |     |
| 6-10. Printed Wiring Boards – CHANGER Section – ..... | 40 |                                                        |     |
| 6-11. Schematic Diagram – CHANGER Section – .....     | 41 |                                                        |     |
| 6-12. Printed Wiring Board                            |    |                                                        |     |
| – MB Section (Component Side) – .....                 | 42 |                                                        |     |
| 6-13. Printed Wiring Board                            |    |                                                        |     |
| – MB Section (Conductor Side) – .....                 | 43 |                                                        |     |
| 6-14. Schematic Diagram – MB Section (1/8) – .....    | 44 |                                                        |     |
| 6-15. Schematic Diagram – MB Section (2/8) – .....    | 45 |                                                        |     |
| 6-16. Schematic Diagram – MB Section (3/8) – .....    | 46 |                                                        |     |
| 6-17. Schematic Diagram – MB Section (4/8) – .....    | 47 |                                                        |     |
| 6-18. Schematic Diagram – MB Section (5/8) – .....    | 48 |                                                        |     |
| 6-19. Schematic Diagram – MB Section (6/8) – .....    | 49 |                                                        |     |
| 6-20. Schematic Diagram – MB Section (7/8) – .....    | 50 |                                                        |     |
| 6-21. Schematic Diagram – MB Section (8/8) – .....    | 51 |                                                        |     |
| 6-22. Printed Wiring Board – MAIN Section – .....     | 53 |                                                        |     |
| 6-23. Schematic Diagram – MAIN Section (1/4) – .....  | 54 |                                                        |     |
| 6-24. Schematic Diagram – MAIN Section (2/4) – .....  | 55 |                                                        |     |
| 6-25. Schematic Diagram – MAIN Section (3/4) – .....  | 56 |                                                        |     |
| 6-26. Schematic Diagram – MAIN Section (4/4) – .....  | 57 |                                                        |     |
| 6-27. Printed Wiring Board – I-BASS Section – .....   | 58 |                                                        |     |
| 6-28. Schematic Diagram – I-BASS Section – .....      | 59 |                                                        |     |

SECTION 1  
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP  
BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.  
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.  
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION  
CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

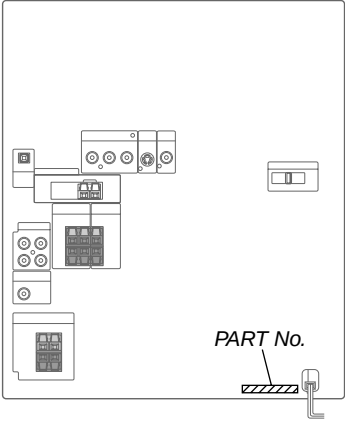
DVD TRAY LOCK MODE

- This mode let you lock the disc trays. When this mode is activated, the disc tray will not open when **▲ OPEN/CLOSE** button or **DISC CHANGE** button is pressed. The message “LOCKED” will be displayed in the will be displayed on the fluorescent indicator tube.

Procedure:

- Press **POWER** button to turn the set ON.
- Select DVD function.
- Press **■** button and **▲ OPEN/CLOSE** button simultaneously and hold down until “LOCKED” or “UNLOCKED” displayed on the fluorescent indicator tube (around 5 seconds).

• MODEL IDENTIFICATION  
– Rear Cover –

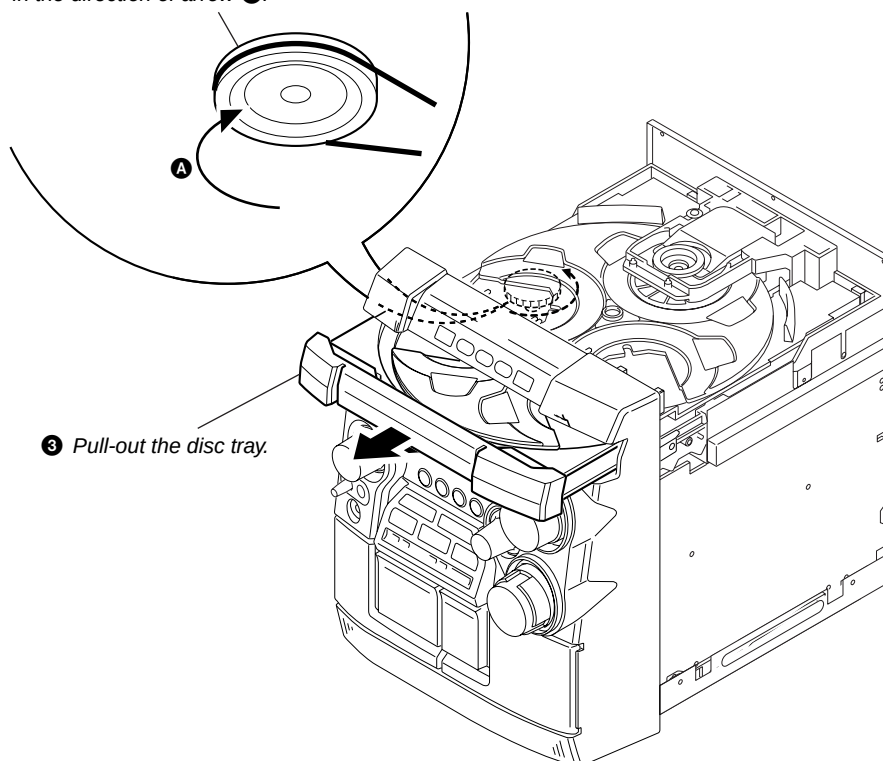


| MODEL                         | PART No.     |
|-------------------------------|--------------|
| Singapore and Malaysia models | 4-247-797-0□ |
| E model                       | 4-247-797-1□ |
| Thai model                    | 4-247-797-5□ |
| AEP model                     | 4-247-797-7□ |
| Chilean and Peruvian models   | 4-247-797-8□ |
| Australian model              | 4-247-797-9□ |
| Saudi Arabia model            | 4-247-798-4□ |

## HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF.

❶ Remove the steel cabinet case.

❷ Turn the loading gear in the direction of arrow A.



❸ Pull-out the disc tray.

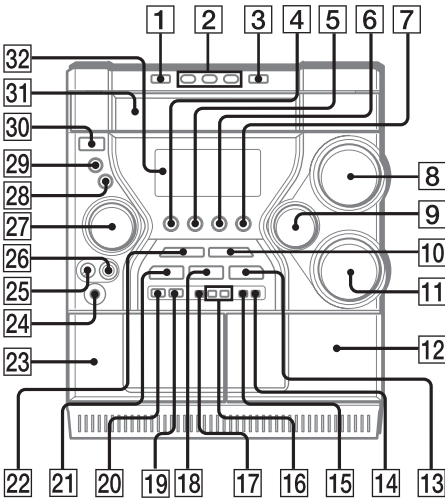
This section is extracted from instruction manual.

• LOCATION OF CONTROLS

Main unit

| ALPHABETICAL ORDER       |
|--------------------------|
| ALBUM +/- 16             |
| BASS 11                  |
| CD SYNC 15               |
| Deck A 23                |
| Deck B 12                |
| DIR (TAPE B) ◀▶ 22       |
| DISC DIRECT PLAY 1/2/3 2 |
| DISC SKIP/EX-CHANGE 1    |
| Disc tray 31             |
| DISPLAY 17               |
| Display window 32        |
| DVD 7                    |
| ENTER 28                 |
| i-Bass 19                |
| MD (VIDEO) 6             |
| MIC jack 26              |
| MIC LEVEL 25             |
| MODE 29                  |
| MULTI JOG 27             |
| OPEN/CLOSE ▲ 3           |
| PHONES jack 24           |
| REC PAUSE/START 14       |
| SOUND FIELD 20           |
| TAPE A/B 4               |
| TREBLE/MIDDLE 9          |
| TUNER/BAND 5             |
| TUNING - ◀◀/◀ 21         |
| TUNING + ▶▶/▶ 13         |
| VOLUME control 8         |

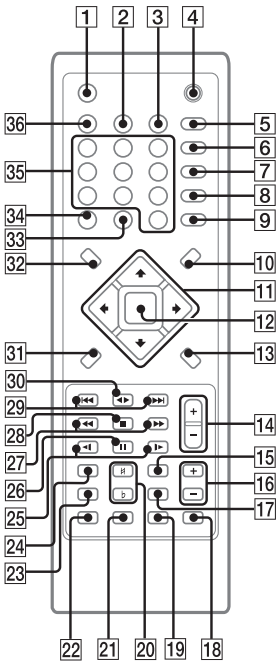
| BUTTON DESCRIPTIONS                   |
|---------------------------------------|
| I/⏻ (power) 30                        |
| ⏸ (pause) 18                          |
| ▲ (OPEN/CLOSE) 3                      |
| ■ (stop) 10                           |
| ▶▶/▶▶  (fast forward/<br>TUNING +) 13 |
| ◀◀ DIRECTION 22                       |
| ◀◀/◀◀ (rewind/TUNING -)<br>21         |



Remote control

| ALPHABETICAL ORDER   |
|----------------------|
| ALBUM +/- 16         |
| AMP MENU 15          |
| CLEAR 9              |
| CLOCK/TIMER SELECT 3 |
| CLOCK/TIMER SET 2    |
| DISPLAY 1            |
| D.SKIP 18            |
| DVD DISPLAY 13       |
| DVD MENU 10          |
| DVD SETUP 17         |
| DVD TOP MENU 32      |
| ECHO 23              |
| ENTER 12             |
| FM MODE 19           |
| FUNCTION*1 34        |
| KARAOKE 24           |
| KEY CONTROL #/b 20   |
| i-Bass 6             |
| Number buttons 35    |
| PLAY MODE 7          |
| PRESET -/PREV ◀◀ 29  |
| PRESET +/NEXT ▶▶ 29  |
| REPEAT 8             |
| ↶ RETURN 31          |
| SELECT ◀▶ 30         |
| SLOW -/+ 25          |
| SHIFT*2 22           |
| SLEEP 36             |
| SOUND FIELD 5        |
| TUNER/BAND 33        |
| TUNER MEMORY 21      |
| TUNING -/+ 27        |
| VOL +/- 14           |

| BUTTON DESCRIPTIONS                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I/⏻ 4                                                                                                                                                                                                                                                          |
| ■ (stop) 28                                                                                                                                                                                                                                                    |
| ◀▶ (SELECT) 30                                                                                                                                                                                                                                                 |
| ⏸ (pause) 26                                                                                                                                                                                                                                                   |
| ↑/↓/←/→ 11                                                                                                                                                                                                                                                     |
| ◀◀ (TUNING -) 27                                                                                                                                                                                                                                               |
| ▶▶ (TUNING +) 27                                                                                                                                                                                                                                               |
| ◀◀ (PRESET -/PREV) 29                                                                                                                                                                                                                                          |
| ▶▶ (PRESET +/NEXT) 29                                                                                                                                                                                                                                          |
| ◀ (SLOW -) 25                                                                                                                                                                                                                                                  |
| ▶ (SLOW +) 25                                                                                                                                                                                                                                                  |
| # (KEY CONTROL) 20                                                                                                                                                                                                                                             |
| b (KEY CONTROL) 20                                                                                                                                                                                                                                             |
| *1 Switches the active function among<br>CD, TAPE, TUNER, MD (VIDEO)<br>and DVD.<br>→ or ← to do the following:<br>S HIFT +↓ = SUBTITLE<br>S HIFT +→ = ANGLE<br>S HIFT +← = AUDIO<br>e.g.) Press and hold SHIFT, and<br>press ↓ to activate the subtitle menu. |
| *2 Press and hold SHIFT and press ↓ ,                                                                                                                                                                                                                          |



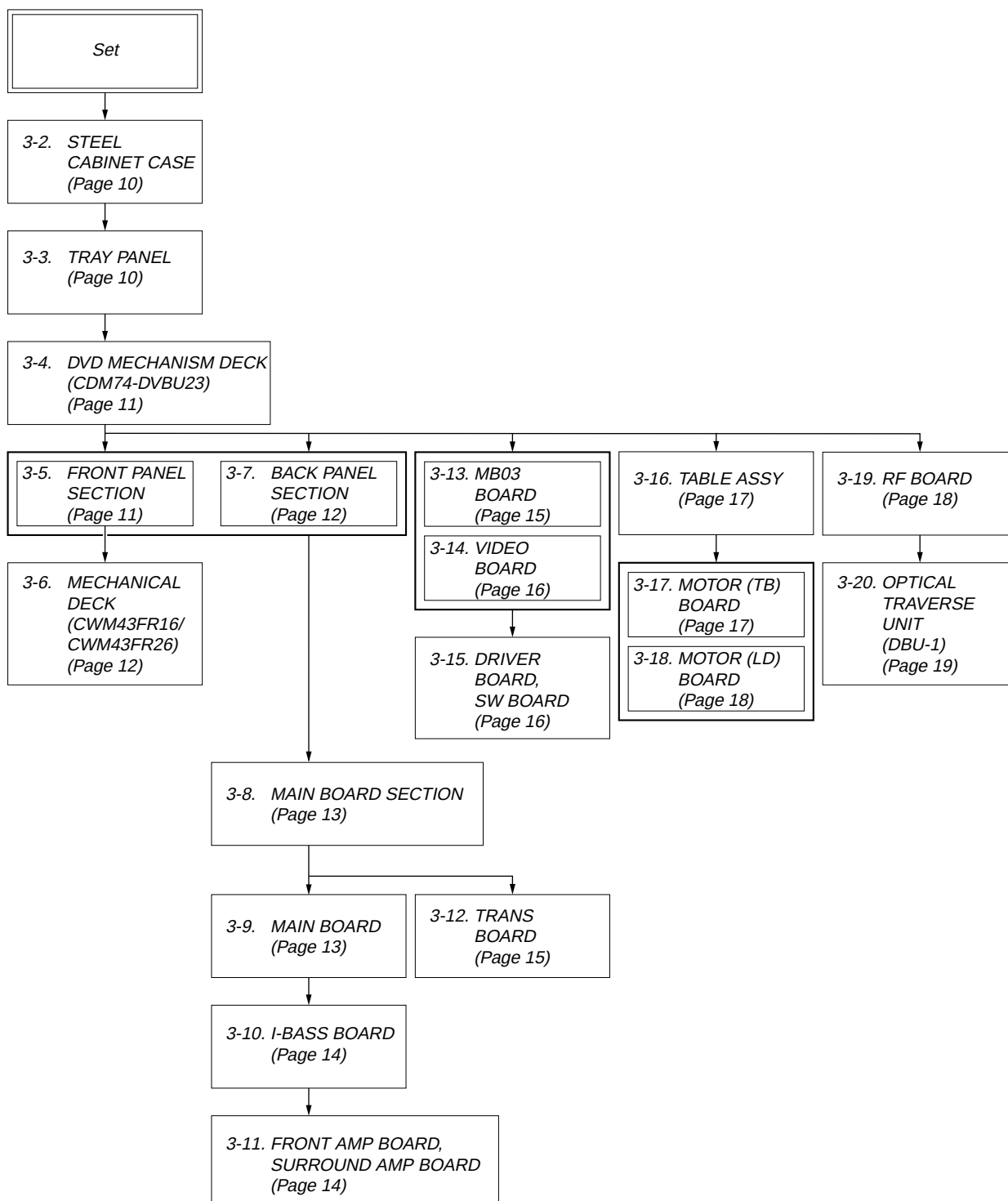
## SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.

### 3-1. DISASSEMBLY FLOW

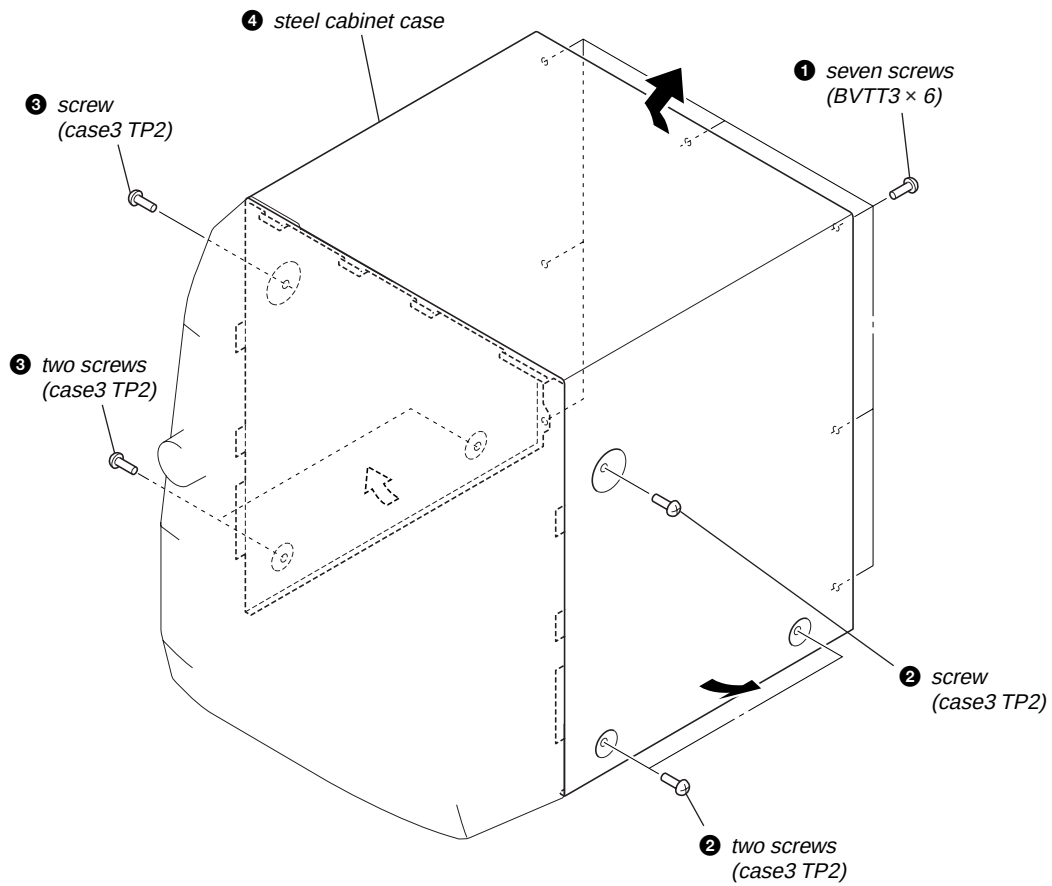
**Note 1:** The process described in  can be performed in any order.

**Note 2:** Without completing the process described in , the next process can not be performed.

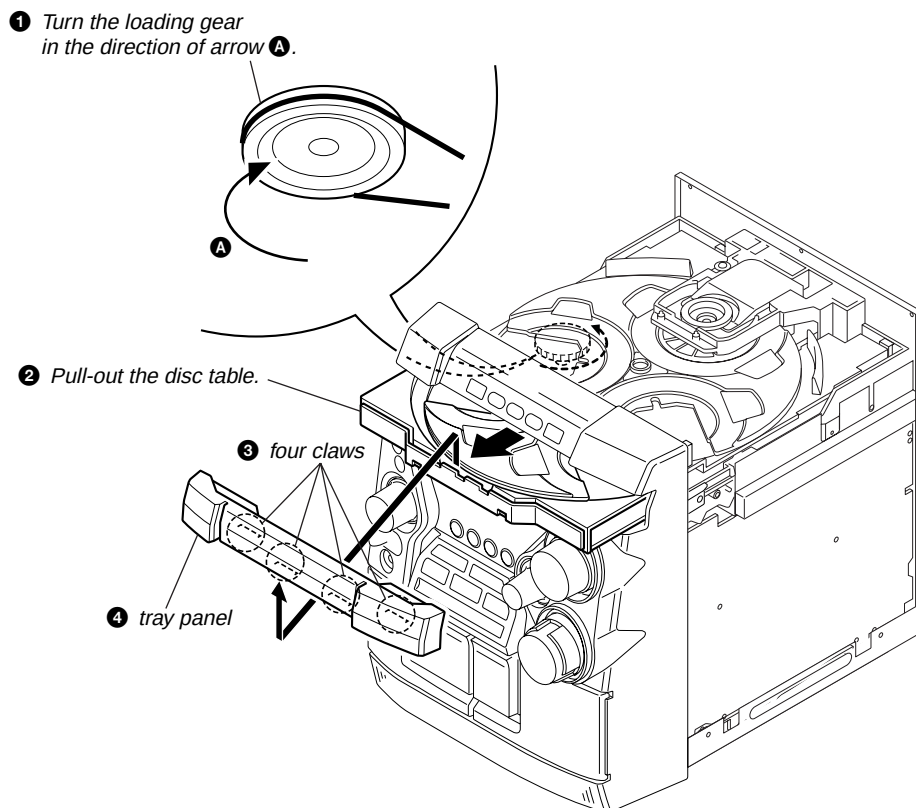


**Note:** Follow the disassembly procedure in the numerical order given.

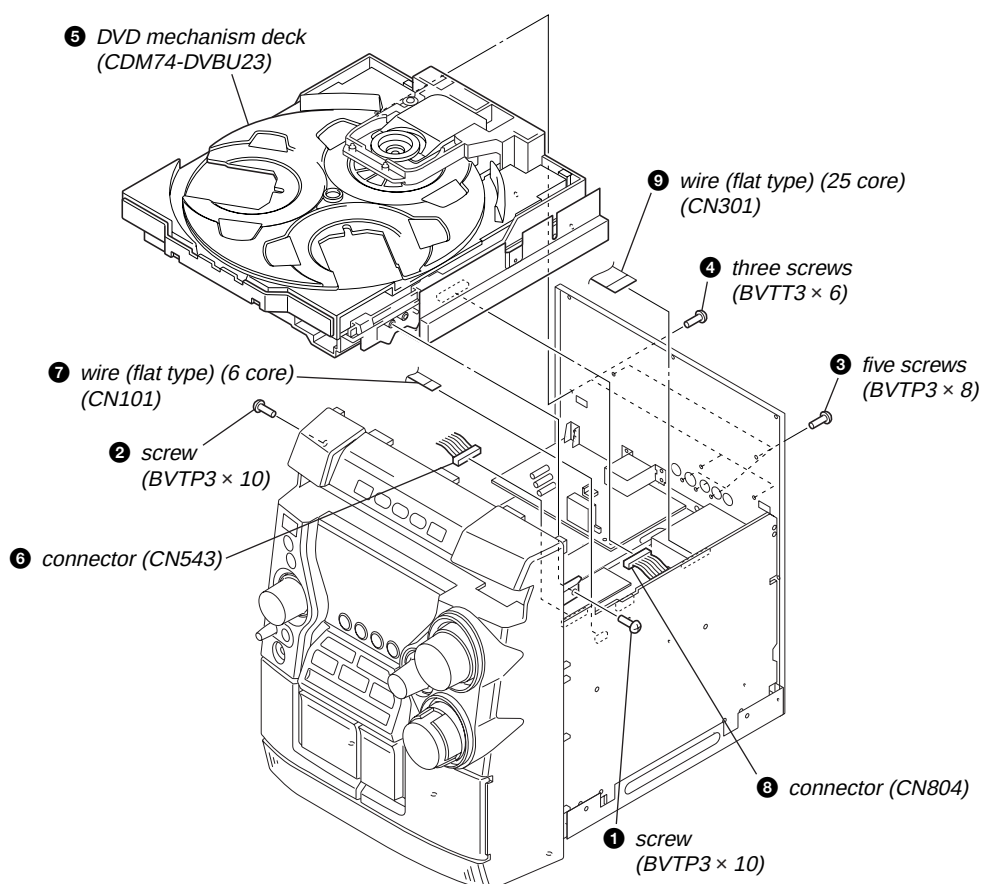
## 3-2. STEEL CABINET CASE



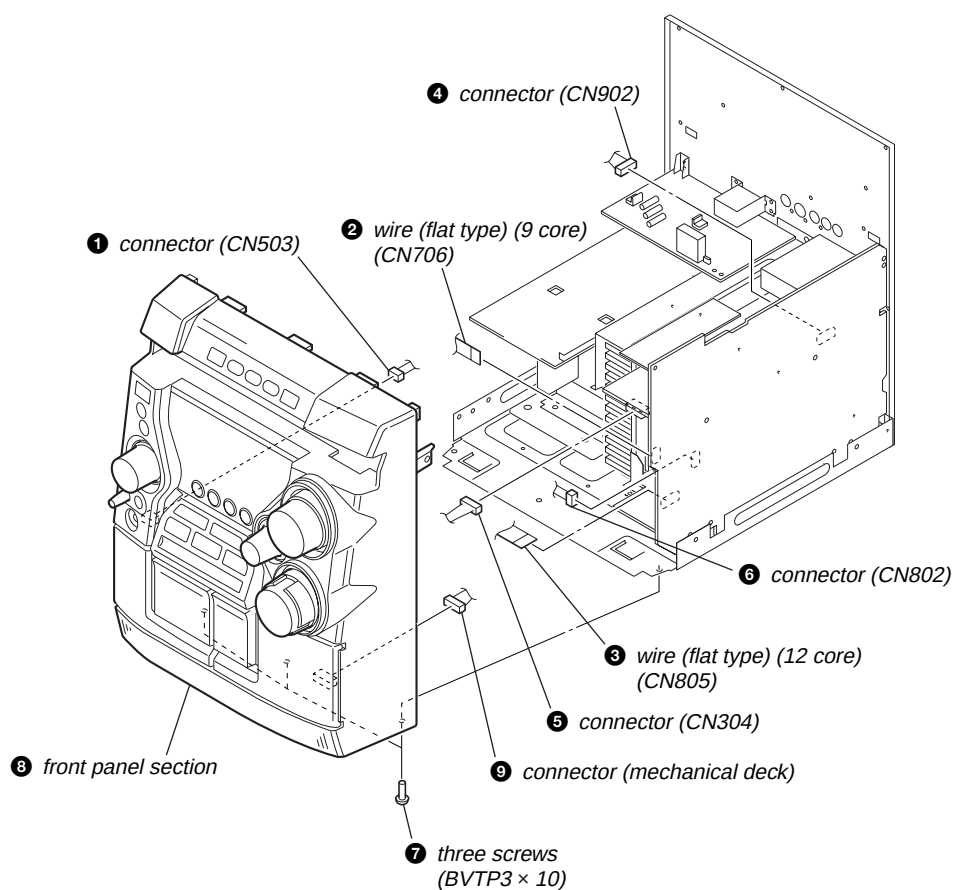
## 3-3. TRAY PANEL



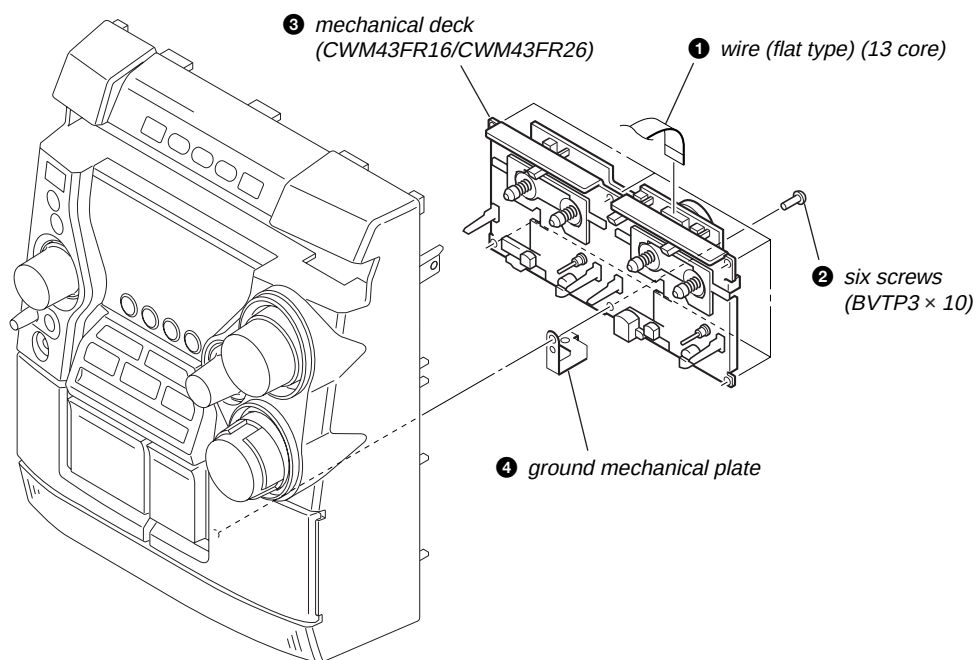
### 3-4. DVD MECHANISM DECK (CDM74-DVBU23)



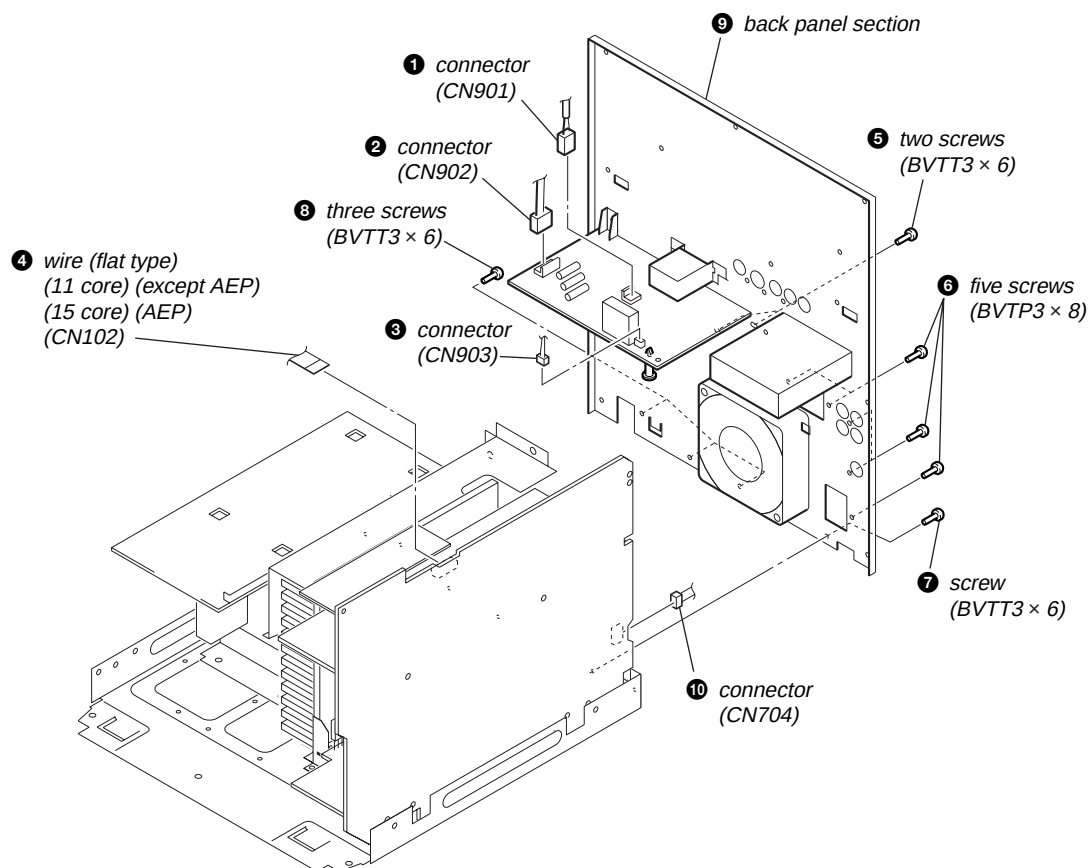
### 3-5. FRONT PANEL SECTION



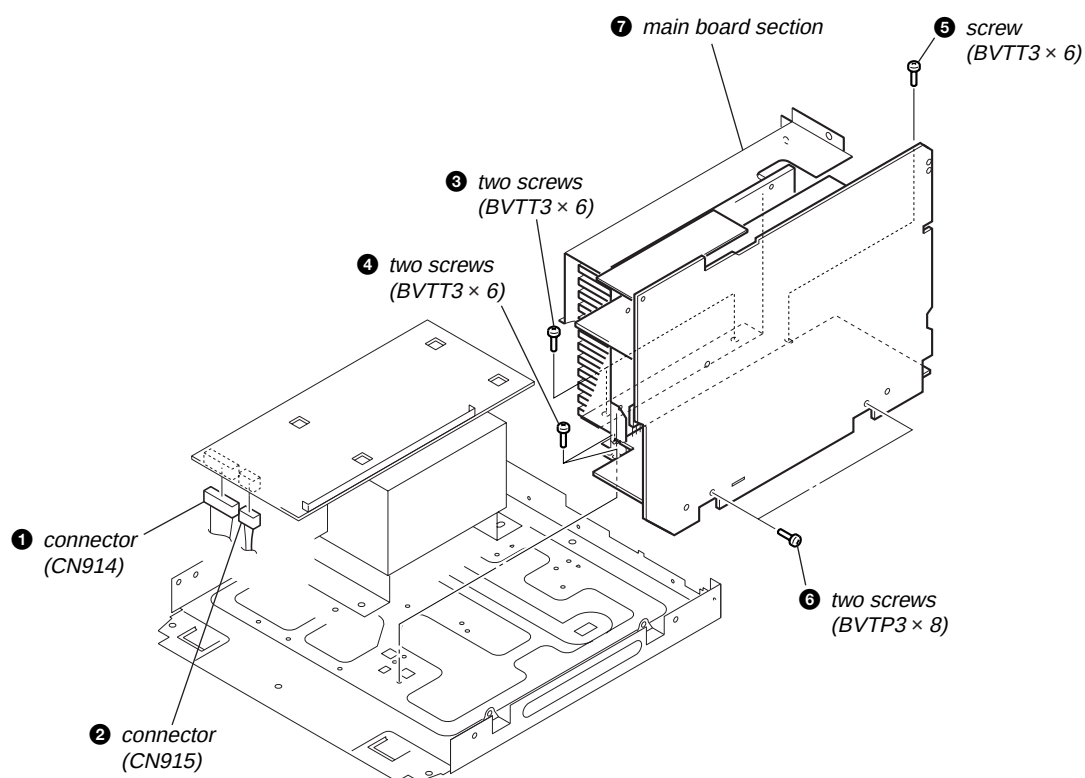
### 3-6. MECHANICAL DECK (CWM43FR16/CWM43FR26)



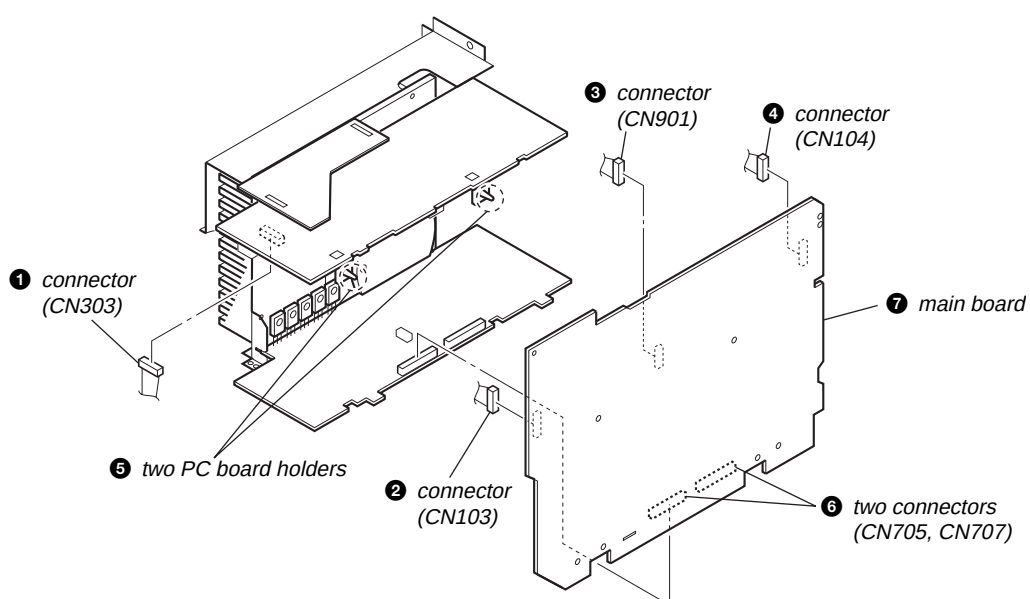
### 3-7. BACK PANEL SECTION



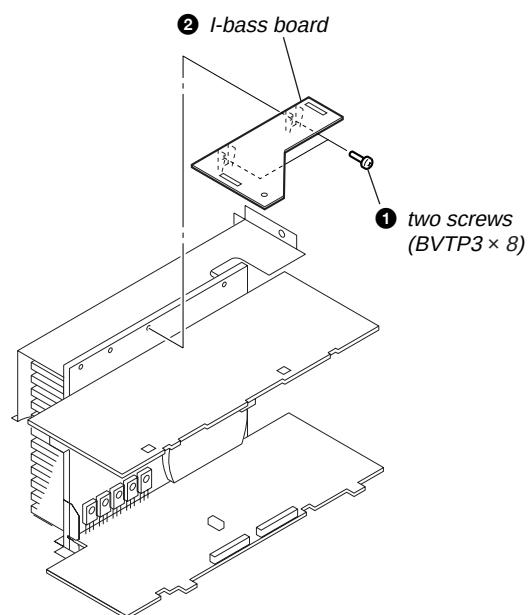
### 3-8. MAIN BOARD SECTION



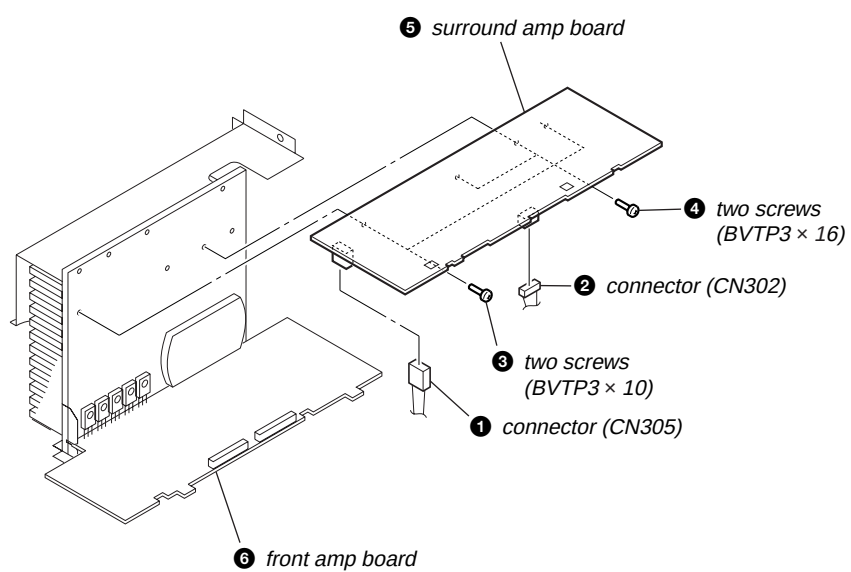
### 3-9. MAIN BOARD



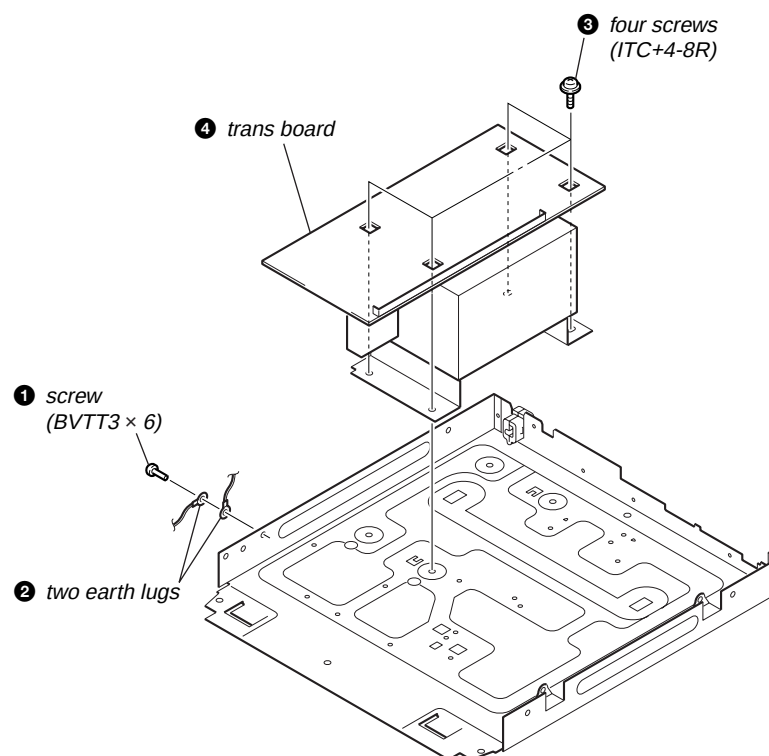
3-10. I-BASS BOARD



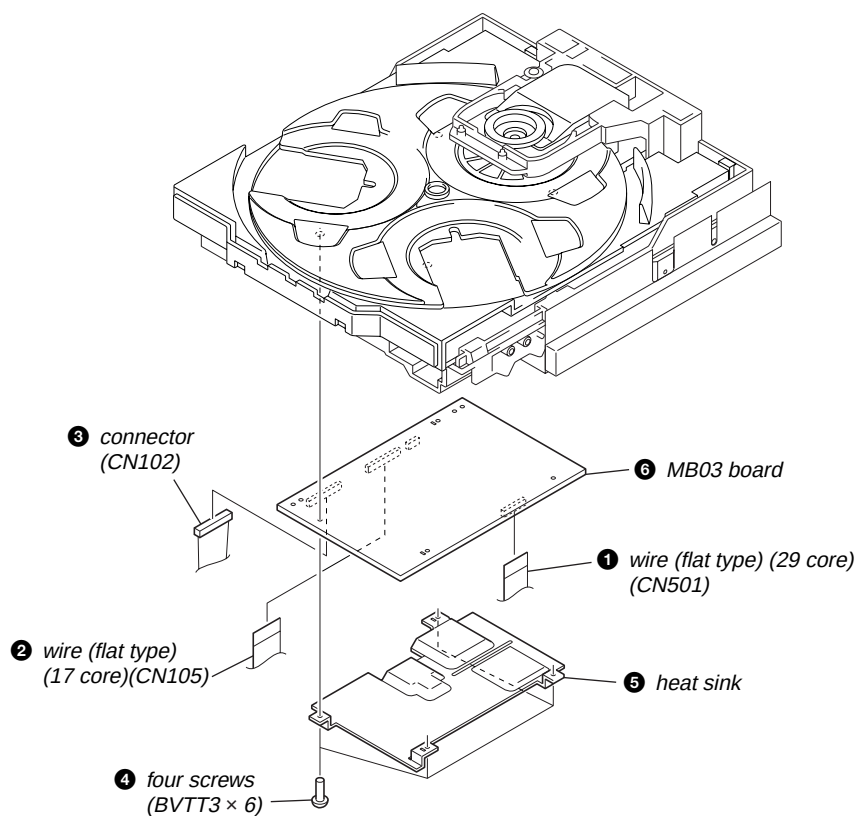
3-11. FRONT AMP BOARD, SURROUND AMP BOARD



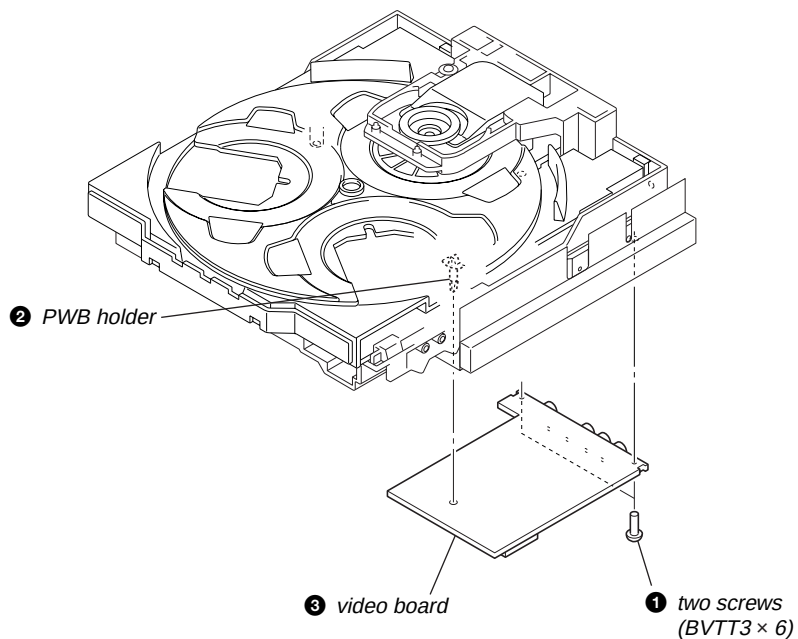
## 3-12. TRANS BOARD



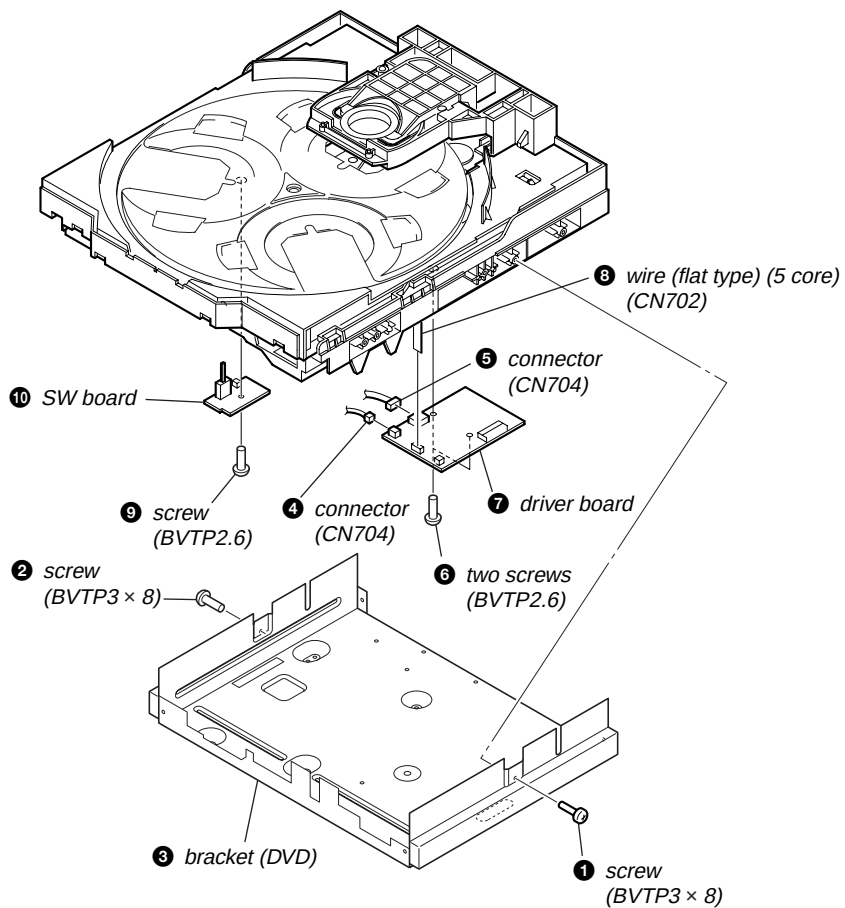
## 3-13. MB03 BOARD



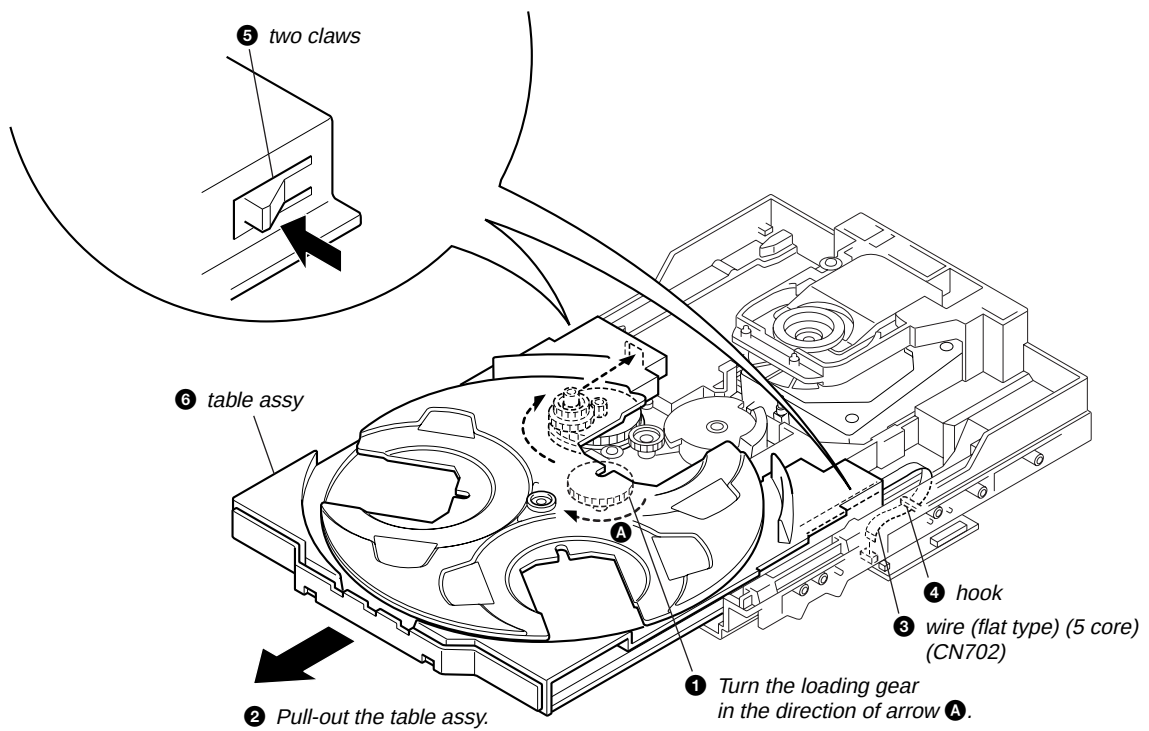
### 3-14. VIDEO BOARD



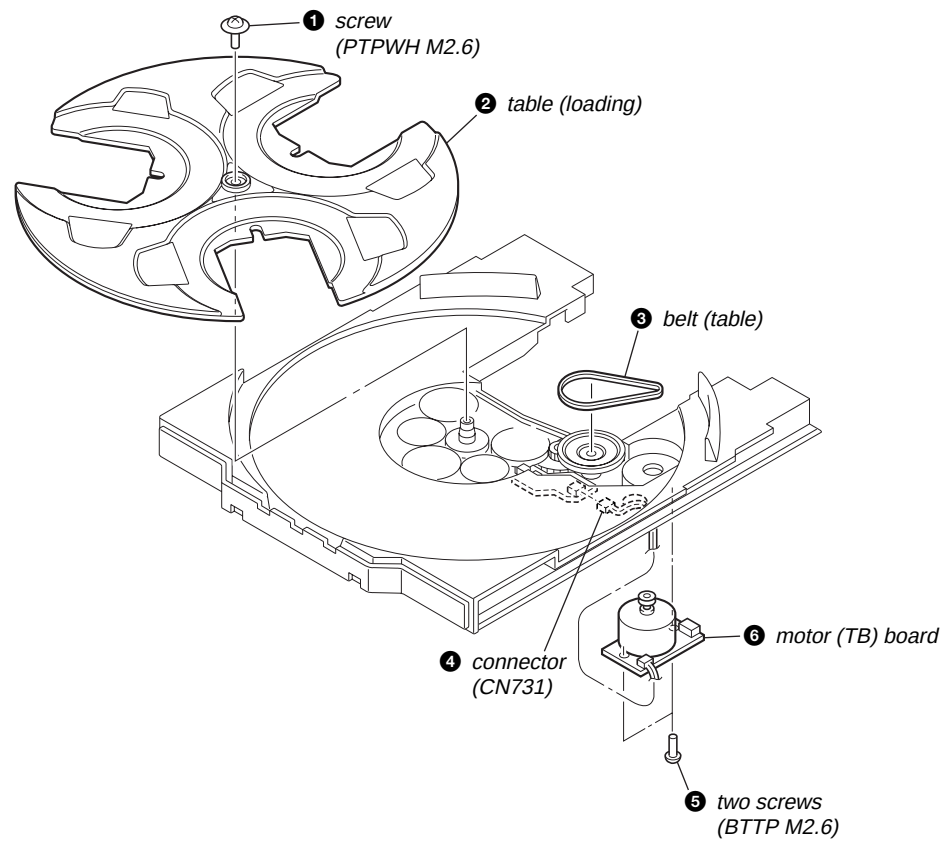
### 3-15. DRIVER BOARD, SW BOARD



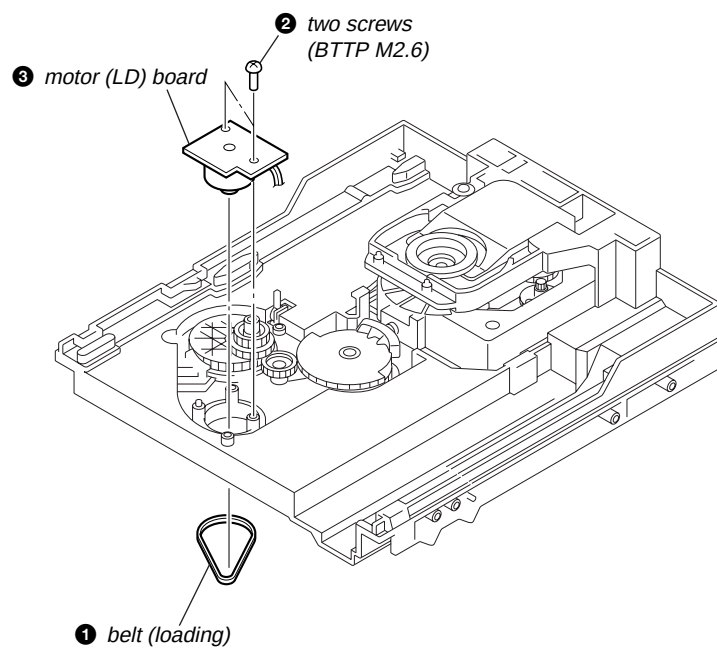
## 3-16. TABLE ASSY



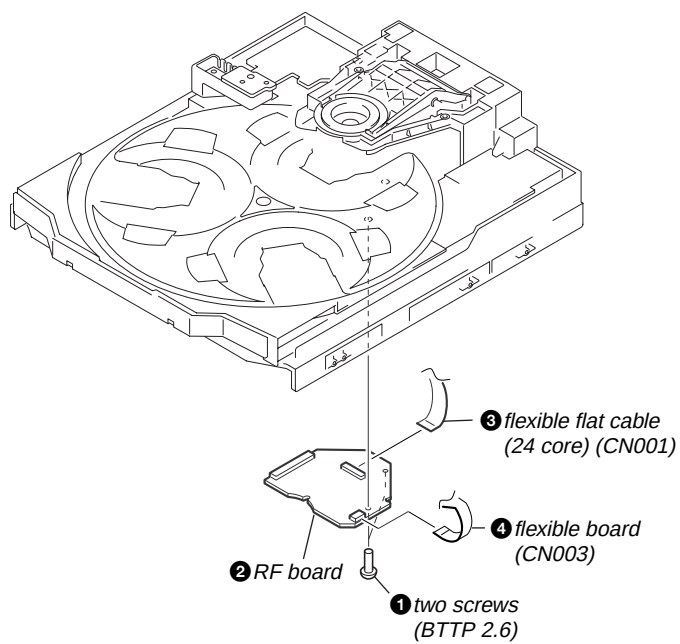
## 3-17. MOTOR (TB) BOARD



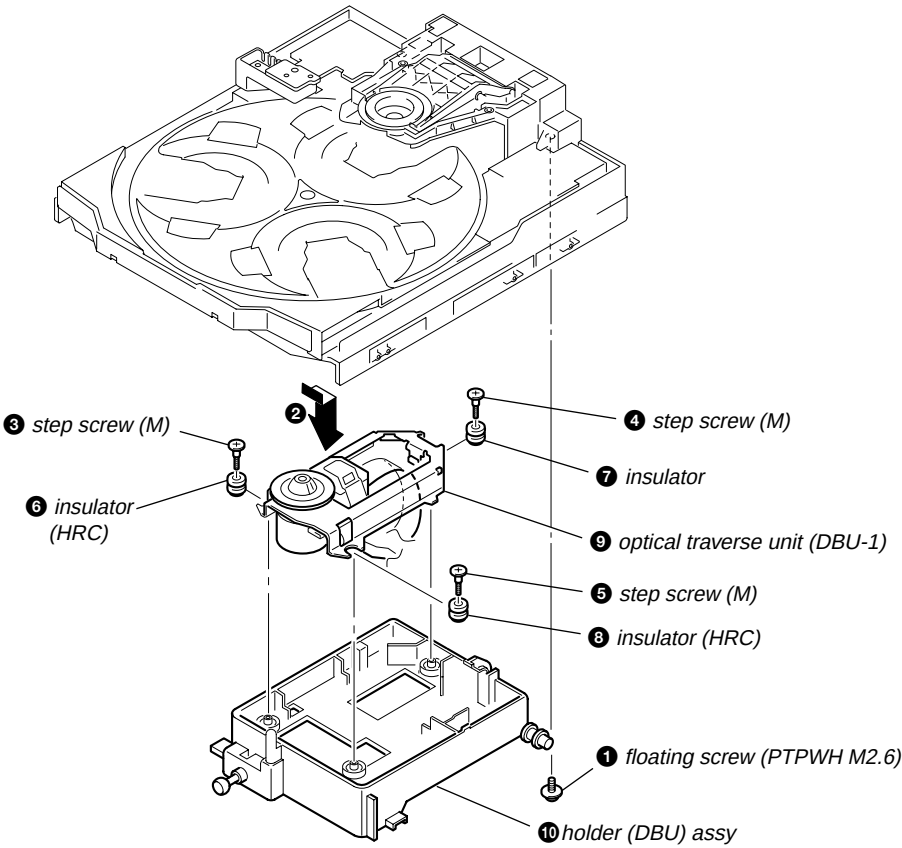
### 3-18. MOTOR (LD) BOARD



### 3-19. RF BOARD



3-20. OPTICAL TRAVERSE UNIT (DBU-1)



## SECTION 4

### TEST MODE

#### [MC TEST MODE]

- This mode is used to check operations of the respective sections of Amplifier, Tuner, and Tape.

##### Procedure:

##### \* To enter MC Test Mode

1. Press **[■]** button, **[ENTER]** button and **[DISC 3]** button simultaneously, the message “TEST MODE” will be displayed on the fluorescent indicator tube.

##### \* Check of Amplifier

1. When **[BASS]** knob is turned clockwise, GEQ increases to its maximum and a message “GEQ MAX” appears on the fluorescent indicator tube.
2. When **[BASS]** knob is turned counter clockwise, GEQ decreases to its minimum and a message “GEQ MIN” appears on the fluorescent indicator tube.
3. When **[SOUND FIELD]** button is pressed, GEQ is set to flat and a message “GEQ FLAT” appears on the fluorescent indicator tube.
4. When the **[VOLUME]** knob is turned clockwise even slightly, the sound volume increases to its maximum and a message “VOL MAX” appears for two seconds, then the display returns to the original display.
5. When the **[VOLUME]** knob is turned counter-clockwise even slightly, the sound volume decreases to its minimum and a message “VOL 0” appears for two seconds, then the display returns to the original display.

##### \* VACS ON/OFF Change Over

1. Press **[i-Bass]** button. The message “VACS OFF” or “VACS ON” appears.

##### \* Tape function

1. When a tape is inserted in Deck B and recording is started, the function is changed to VIDEO automatically.
2. After recording is stopped by pressing **[■]** button, press **[←◀]** button will change the function to TAPE B and rewind Tape B until the recording start position and playback of Tape B is started. If the **[REC PAUSE/ START]** button is pressed for a pause and pressed again to resume recording during recording time, when tape deck B is rewind, tape deck B will be rewind until the position where the pause is applied.

##### \* AMS Test Mode

1. Select the function “TAPE A” or “TAPE B”.
2. Insert a test tape AMS-110A or AMS-120 to selected tape deck.
3. Press the **[CD STNC]** button to enter the AMS test mode.
4. After the test tape is rewind to the beginning of the tape, the AMS+ is checked, and the mechanism is shut off after detecting the AMS signal twice.
5. Then the AMS- is checked and the mechanism is shut off after detecting the AMS signal twice.
6. When the check is complete, a message of either OK or NG appears.

##### \* To release MC Test mode.

1. To release this mode, press **[POWER]** button.
2. The cold reset is enforced at the same time.

#### [AMP TEST MODE ]

- This mode is used in order to set up each section of amplifier.

##### Procedure:

1. Press **[■]** button, **[ENTER]** button and **[DISC2]** button simultaneously, the message “AMP TEST” will be displayed on the fluorescent indicator tube.
2. Press **[ENTER]** button and **[DISC1]** button simultaneously, VACS display/amplifier regulation display is switched.
3. Press **[SOUND FIELD]** button, SURROUND ON/OFF is switched.
4. Press **[i-Bass]** button, i-Bass ON/OFF is switched.
5. Turn the **[BASS]** knob, BASS (i-Bass) volume adjustment is performed.
6. Press **[ENTER]** button, i-Bass  $f_0$  adjustment is performed.
7. To release this mode, pull out the AC cord. Then insert the AC code, and press **[POWER]** button to turn the set ON. The cold reset is enforced at the same time.

#### [PANEL TEST MODE ]

- This mode is used check operation of the front panel.

##### Procedure:

1. Press **[■]** button, **[ENTER]** button and **[DISC2]** button simultaneously, all LED and segments in fluorescent indicator tube are lighted up.
2. Press **[ENTER]** button and **[DISC2]** button simultaneously, the key check mode is activated. In the key check mode, the fluorescent indicator tube displays “KEY 0 0 0”. While pressing the key, the number corresponding to each key is displayed. Example: When **[ENTER]** button is pressed “KEY 0 2 0”
3. Press **[ENTER]** button and **[DISC2]** button simultaneously again, the key control mode is activated. In the key control mode, the fluorescent indicator tube displays “KEYCONT 0”.
4. Press **[ENTER]** button and **[DISC2]** button simultaneously again, “VOLUME FLR” will be displayed.  
When the **[VOLUME]** knob is turned clockwise, the message “VOLUME UP” appears for two seconds, then the message “VOLUME FLR” is displayed again.  
When the **[VOLUME]** knob is turned counter-clockwise, the message “VOLUME DOW” appears for two seconds, then the message “VOLUME FLR” is displayed again.
5. Press **[ENTER]** button and **[DISC2]** button simultaneously again, release from this mode.

#### [VERSION DISPLAY]

- This mode is used check the model, destination, software version.

##### Procedure:

1. Press **[■]** button, **[ENTER]** button and **[DISC3]** button simultaneously, the model and destination are displayed.
2. Each time **[ENTER]** button and **[DISC2]** button is pressed simultaneously, the display changes from MC version, GC version and DVD version in this order, and release from this mode.
3. When **[ENTER]** button and **[DISC2]** button is pressed simultaneously while the version numbers are being displayed except model and destination, the date of the software creation appear. When **[ENTER]** button and **[DISC2]** button is pressed simultaneously again, the display returns to the software version display.

#### [COLD RESET]

- The cold reset clears all data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

##### Procedure:

1. Press **[■]** button, **[ENTER]** button, and **[DISC1]** button simultaneously.
2. The fluorescent indicator tube becomes blank for a while, and the set is reset.

**[HOT RESET]**

- The hot reset clears data except BUCKUP stored in the RAM.

**Procedure:**

- Press **[II]** button, **[ENTER]** button, and **[DISC1]** button simultaneously.
- The fluorescent indicator tube becomes blank for a while, and the set is reset.

**[TUNER STEP CHANGE]**

- The step interval of AM channels can be toggled between 9 kHz and 10 kHz.

**Procedure:**

- Press **[POWER]** button to turn the set ON.
- Press **[TUNER/BAND]** button to select the "AM".
- Press **[POWER]** button to turn the set OFF.
- Press **[ENTER]** button and **[POWER]** button simultaneously. The system will turn ON automatically. The message "AM 9k STEP" or AM 10k STEP" appears and thus the channel step is changed.

**[DVD REPEAT 5 LIMIT OFF MODE]**

- The number of repeat for DVD playback is 5 times when the repeat mode is "REPEAT ALL". This mode enables DVD to repeat playback for limitless times.

**Procedure:**

- Press **[POWER]** button to turn the set ON.
- Select DVD function.
- Press **[II]** button, **[ENTER]** button, and **[DVD]** button simultaneously to enter the DVD repeat 5 limit off mode.
- To release this mode, operate the cold reset. (Refer to the "MC COLD RESET")

**[DVD SHIP MODE (LOCK)]**

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

**Procedure:**

- Press **[POWER]** button to turn the set ON.
- Select DVD function.
- Press **[DVD]** button and **[POWER]** button simultaneously. The set will power off automatically.
- After the "SEE YOU" blinking display finish, a message "LOCK" is displayed on the fluorescent indicator tube and the DVD ship mode is set.

**[DVD POWER MANAGE]**

- This mode let you switch on or off power supply to the BU during TUNER function.
- When DVD POWER is set to OFF, the power supply to the BU is cut off during TUNER function. It will increase the time taken to access DVD when function change from TUNER to DVD but it will improve tuner reception.
- When DVD POWER is set to ON, the power supply to the BU is not cut off during TUNER function. It will reduce the time taken to access DVD when function change from TUNER to DVD but it will decrease tuner reception performance.

**Procedure:**

- Press **[POWER]** button to turn the set ON.
- Select DVD function.
- Press **[POWER]** button to turn the set OFF.
- Press **[■]** button, **[POWER]** button simultaneously. The set will power on automatically.
- The message "DVD POWER" will be displayed on the fluorescent indicator tube.

**[DVD COLOR SYSTEM CHANGE OVER]**

- The color system can be changed over NTSC or PAL.

**Procedure:**

- Press **[POWER]** button to turn the set ON.
- Select DVD function.
- Press **[POWER]** button to turn the set OFF.
- Press **[II]** button, **[POWER]** button simultaneously. The set will power on automatically.
- The message "COLOR PAL" or "COLOR NTSC" will be displayed on the fluorescent indicator tube. The color system is changed over.

**[DVD TRAY LOCK MODE]**

- This mode let you lock the disc trays. When this mode is activated, the disc tray will not open when **[▲ OPEN/CLOSE]** button or **[DISC CHANGE]** button is pressed. The message "LOCKED" will be displayed in the will be displayed on the fluorescent indicator tube.

**Procedure:**

- Press **[POWER]** button, to turn the set ON.
- Select DVD function.
- Press **[■]** button and **[▲ OPEN/CLOSE]** button, simultaneously and hold down until "LOCKED" or "UNLOCKED" displayed on the fluorescent indicator tube (around 5 seconds).

**[MD/VIDEO SWITCHING]**

- This mode let you switch from MD to VIDEO and vice-versa.

**Procedure:**

- Press **[POWER]** button, to turn the set ON.
- Select MD function.
- Press **[VIDEO/AUX]** and **[POWER]** button simultaneously. The function will change to VIDEO. Press the same buttons again to change from VIDEO to MD.

**[DVD TEST MODE GENERAL DESCRIPTION]**

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

**[STARTING DVD TEST MODE]**

- Press the **[POWER]** button to turn the power on.
- Select the function "DVD".
- Press the **[POWER]** button to turn the power off.
- Press two buttons of **[■]** and **[▲ OPEN/CLOSE]** for more than 1 second simultaneously, and **[VOLUME]** knob is turned clockwise.
- It displays "SERVICE IN" on the fluorescent indicator tube, and displays the Test Mode Menu on the monitor screen as follows. (At the bottom of the menu screen, the model name and revision number are displayed)

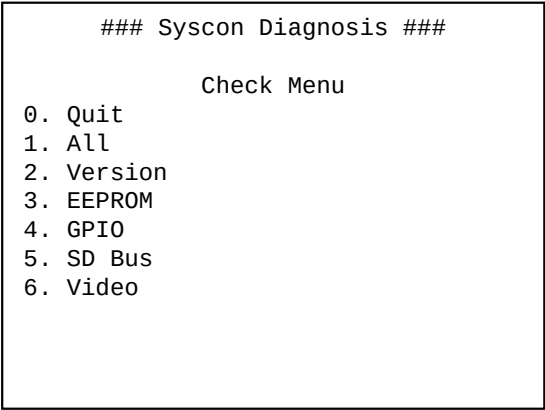
| Test Mode Menu  |                        |
|-----------------|------------------------|
| 0.              | Syscon Diagnosis       |
| 1.              | Drive Auto Adjustment  |
| 2.              | Drive Manual Operation |
| 3.              | Mecha Aging            |
| 4.              | Emergency History      |
| 5.              | Mecha Error History    |
| 6.              | Version Information    |
| 7.              | Video Level Adjustment |
| Exit: POWER Key |                        |
| Model           | : JAX-Dxxxx            |
| Revision        | : x.xx                 |

- To execute each function, select the desired menu and press its number on the remote commander (RM-Z20013).
- To release from test mode, press the **[POWER]** button and turn the power off.

[OPERATING DVD TEST MODE]

0. SYSCON DIAGNOSIS

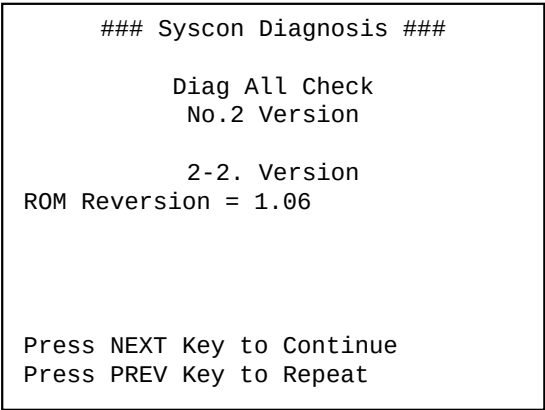
The same contents as board detail check by serial interface can be checked from the remote commander operation.  
On the Test Mode Menu screen, press [10/0] key on the remote commander, and the following Check Menu will be displayed.



**0-0. Quit**  
Quit the Syscon Diagnosis and return to the Test Mode Menu.

**0-1. All (All items continuous check)**  
This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

• Example display



For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.  
Following the message, press the [NEXT ►►] button to go to the next item, or press the [PREV ◀◀] button to repeat the same operation again.  
To quit the diagnosis and return to Check Menu screen, press the [RETURN] key on the remote commander to display Check Menu.

• Error occurred  
If an error occurred, the diagnosis is suspended and error is displayed. Press the [RETURN] key on the remote commander to quit the diagnosis, or press the [PREV ◀◀] button to repeat the same check where an error occurred, or press the [NEXT ►►] button to continue the check from the item next to faulty item.

**General Description of Checking Method**  
Selecting 2 and subsequent items calls the submenu screen of each item. And selecting 2 and subsequent items executes respective menus and outputs the results.  
For the contents of each submenu, see “Check Items List” as below.

- Check Items List:**
- 0-2. Version
    - 0-2-1. All
    - 0-2-2. Revision
    - 0-2-3. ROM Check Sum
    - 0-2-4. Model Type
    - 0-2-5. Region
  - 0-3. EEPROM Check
    - 0-3-1. Sampling Check
    - 0-3-2. Detail Check
  - 0-4. GP I/O Check
  - 0-5. SD Bus Check
  - 0-6. Video Check
  - 0-7. Audio Check

**0-2. Version**  
0-2-2. Revision  
The revision number of ROM IC204 that the program for the DVD system processor (IC207) is stored.  
(4 digits hexadecimal number)  
  
0-2-3. ROM Check Sum  
The revision number of ROM IC204 that the program for the DVD system processor (IC207) is stored.  
  
0-2-4. Model Type  
Model name is displayed. (JAX-D5)  
  
0-2-5. Region  
Model destination code is displayed. (2 digits number)

**0-3. EEPROM Check**  
0-3-1. Sampling Check  
EEPROM check at every 64 words.  
It compares read data with write data of each address. When there are discrepancies between two data, it displays error.  
  
0-3-2. Detail Check  
EEPROM check at every 1 word.  
It compares read data with write data of each address. When there are discrepancies between two data, it displays error.

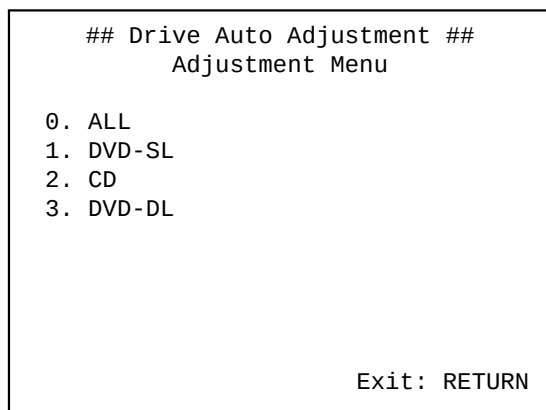
**0-4. GP I/O Check**  
Pull up/down setting check of the DVD system processor (IC207) pin 150, 151 and 154 (for clock setting port).

**0-5. SD Bus Check**  
SD bus data check between DVD decoder (IC701) and MPEG DECODER (IC207).

**0-6. Video Check**  
Output the color bars for video level adjustment.

## 1. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press the **[1]** key on the remote commander, and the Adjustment Menu will be displayed.



Normally, **[10/0]** is selected to adjust DVD (single layer), CD and DVD (dual layer) in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen. The disc used for adjustment must be the one specified for adjustment.

### 1-0. ALL

Press the **[10/0]** key on the remote commander, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc and 3. DVD-DL disc are adjusted in this order.

Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. You can finish the adjustment by pressing the **[RETURN]** button on the remote commander.

**Note:** During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

### 1-1. DVD-SL (single layer)

Press the **[1]** key on the remote commander and insert a DVD single layer disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

#### DVD Single Layer Disc Adjustment Steps:

1. Sled reset
2. Disc check memory SL
3. Wait 300 msec
4. Set disc type SL
5. LD on
6. Spindle start
7. Wait 1 sec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. Wait 1 sec
14. Sled on
15. Check CLV on
16. Auto focus offset adjust
17. Auto focus gain adjust
18. Auto focus offset adjust
19. EQ boost adjust
20. Auto track gain adjust
21. All servo stop
22. EEP copy loop filter offset

### 1-2. CD

Press the **[2]** key on the remote commander and insert a CD disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

#### CD Adjustment Steps

1. Sled rest
2. Disc check memory CD
3. Wait 500 msec
4. Set disc type CD
5. LD on
6. Spindle start
7. Wait 500 msec
8. Focus servo on 0
9. Auto track offset adjust
10. CLVA on
11. Wait 500 msec
12. Tracking on
13. (TC display start)
14. Wait 1 sec
15. Sled ON
16. Check CLV on
17. Auto focus offset adjust
18. Auto focus gain adjust
19. Auto focus offset adjust
20. EQ boost adjust
21. Auto track gain adjust
22. All servo stop

1-3. DVD-DL (dual layer)

Press the [3] key on the remote commander and insert a DVD dual layer disc following the message. Then the adjustment will be made through the steps, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps:

- 1. Sled reset
  - 2. Disc check memory DL
  - 3. Wait 500 msec
  - 4. Set disc type DL
  - 5. LD on
  - 6. Spindle start
  - 7. Wait 1 sec
- Layer 1 Adjust
- 8. Focus servo on 0
  - 9. Auto track offset adjust
  - 10. CLVA on
  - 11. Wait 500 msec
  - 12. Tracking on
  - 13. Wait 500 msec
  - 14. Sled on
  - 15. Check CLV lock
  - 16. Auto focus adjust
  - 17. Auto focus gain adjust
  - 18. Auto focus offset adjust
  - 19. EQ boost adjust
  - 20. Auto Track Gain Adjust
- Layer 0 Adjust
- 21. Focus jump (L1 → L0)
  - 22. Auto track offset adjust L0
  - 23. CLVA on
  - 24. Wait 500 msec
  - 25. Tracking on
  - 26. Wait 500 msec
  - 27. Sled on
  - 28. Check CLV lock
  - 29. Auto Focus Adjust
  - 30. Auto focus gain adjust
  - 33. Auto focus offset adjust
  - 34. EQ boost adjust
  - 35. Auto track gain adjust
  - 37. All servo stop

2. DRIVE MANUAL OPERATION

**Note:** This mode is used for design, and not used in service fundamentally.

On the Test Mode Menu screen, press the [2] key on the remote commander, and the Operation Menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

## Drive Manual Operation ##  
Operation Menu  
1. Disc Type  
2. Servo Control  
3. Track/Layer Jump  
4. Non EEPROM Write Adjust  
5. EEPROM Write Adjust  
6. Memory Check  
7. Disc Check Memory  
8. Error Rate Display  
9. SACD Water Mark  
  
Exit: RETURN

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

**Note:**  
1. Set correctly the disc type to be used on the Disc Type screen.  
2. In case of an alarm, exit the manual operation menu immediately to stop the servo operation, and press the [POWER] button to turn the power off.

- Basic operation:**  
(controllable from front panel or remote commander)
- [POWER] : Power OFF (release the Test Mode)
  - [▲ OPEN/CLOSE] : Stop and eject/Loading
  - [RETURN] : Return to Operation Menu or Test Mode Menu
  - [PREV ◀◀] , [NEXT ▶▶] : Transition between sub modes of menu
  - [1] to [9] , [10/0] : Selection of menu items
  - Cursor [↓] / [↑] : Increase/Decrease in manually adjusted value

## 2-1. Disc Type

| Disc Type               |  |
|-------------------------|--|
| Disc Type Select        |  |
| 1. Disc Type Auto Check |  |
| 2. Set Disc Type DVD    |  |
| 3. Set Disc Type CD     |  |
| 4. Set Disc Type Hybrid |  |
| Exit: RETURN            |  |

### 2-1-1. Disc Type Auto Check

- 1) Press the **[1]** key on the remote commander to display the Disc Type Auto Check screen.
- 2) Insert a disc and press the **[ENTER]** key on the remote commander.
- 3) It judges the type of inserted disc automatically and displays the disc type and so on as below.

| Disc Type Auto Check |    |
|----------------------|----|
| Disc Type            | xx |
| Layer                | xx |
| Mirr Time            | xx |
| Mirr Count           | xx |
| FZC Count            | xx |
| PI Reference         | xx |
| PI Peak              | xx |
| ENTER.Execute        |    |
| Exit: RETURN         |    |

Disc Type : CD or DVD  
 Layer : SINGLE or DUAL  
 Mirr Time : Mirror time of between disc surface and record surface when disc type judgment. (hexadecimal number)  
 Mirr Count : The number of times which mirror counts between disc surface and record surface when disc type judging.  
 FZC Count : The number of times which focus zero cross points of each layer when lens down.  
 PI Reference : The average of PI reference voltage. (hexadecimal number)  
 PI Peak : PI peak level voltage. It performs only when disc type judgment is successful. (hexadecimal number)

### 2-1-2. Disc Type DVD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: DVD single layer disc (12 cm)
- [2]**: DVD dual layer disc (0 layer, 12 cm)
- [3]**: DVD dual layer disc (1 layer, 12 cm)
- [4]**: DVD-RW disc (12 cm)
- [5]**: DVD single layer disc (8 cm)
- [6]**: DVD dual layer disc (0 layer, 8 cm)
- [7]**: DVD dual layer disc (1 layer, 8 cm)
- [8]**: DVD-RW disc (8 cm)

### 2-1-3. Disc Type CD

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: CD disc (normal speed, 12 cm)
- [2]**: CD disc (double speed, 12 cm)
- [3]**: CD disc (normal speed, 8 cm)
- [4]**: CD disc (double speed, 8 cm)
- [5]**: CD-RW disc (normal speed, 12 cm)
- [6]**: CD-RW disc (double speed, 12 cm)
- [7]**: CD-RW disc (normal speed, 8 cm)
- [8]**: CD-RW disc (double speed, 8 cm)

### 2-1-4. Disc Type Hybrid

It sets up so that it may judge as a disc type of specification of the disc with which the set was inserted.

- [1]**: SACD Hybrid disc (SACD layer, 12 cm)
- [2]**: SACD Hybrid disc (CD layer, normal speed, 12 cm)
- [3]**: SACD Hybrid disc (CD layer, double speed, 12 cm)
- [4]**: SACD Hybrid disc (SACD layer, 8 cm)
- [5]**: SACD Hybrid disc (CD layer, normal speed, 8 cm)
- [6]**: SACD Hybrid disc (CD layer, double speed, 8 cm)

## 2-2. Servo Control

**Note:** Be sure to perform the disc type setup before performing this item.

| Servo Control   |                  |
|-----------------|------------------|
| 1.LD            | off R.Sled FWD   |
| 2.Focus         | off L.Sled REV   |
| 3.SPDL          | off U.Sled Reset |
| 4.CLVA          | off D.Sled Limit |
| 5.Trk.          | off              |
| 6.Sled          | off              |
| 7.Fcs.Srch      | off              |
| 0.All Servo Off |                  |
| Exit: RETURN    |                  |

On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked. The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

- [1]** LD : Turn on/off the laser.
- [2]** Focus : Search the focus and turn on the focus.
- [3]** SPDL : Turn on/off the spindle.
- [4]** CLVA : Turn on/off normal servo of spindle servo.
- [5]** Trk. : Turn on/off the tracking servo.
- [6]** Sled : Turn on/off the sled servo.
- [7]** FCS. Srch : Turn on/off the focus search.
- [10/0]** : All servo off.
- [R]** Sled FWD (right cursor) : Move the sled forward.
- [L]** Sled REV (left cursor) : Move the sled reverse.
- [U]** Sled FWD (up cursor) : Reset the sled.
- [D]** Sled REV (down cursor) : Limit in the sled.

2-3. Track/Layer Jump

Track/Layer Jump

1. 1Tj FWD

2. 1Tj REV

3.500Tj Fine FWD

4.500Tj Fine REV

5.10kTj Dirc FWD

6.10kTj Dirc REV

7.20kTj Dirc FWD

8.20kTj Dirc REV

0. All Servo Off

Exit: RETURN

On this screen, track jump, etc. can be performed. Only for the DVD dual layer disc, the focus jump and layer jump are displayed in the right field

- 1

1Tj FWD : 1 track jump forward.
- 2

1Tj REV : 1 track jump reverse.
- 3

500Tj FWD : 500 track jump (fine search)forward.
- 4

500Tj REV : 500 track jump (fine search) reverse.
- 5

10kTj FWD : 10k track jump (direct search) forward.
- 6

10kTj REV : 10k track jump (direct search) reverse.
- 7

20kTj FWD : 20k track jump (direct search) forward.
- 8

20kTj REV : 20k track jump (direct search) reverse.
- 10/0

: All servo off.

2-4. Non EEPROM Write Adjust

Non EEPROM Write Adjust

1. Focus Offset

2. Focus Gain

3. Trk. Offset Coarse

4. Trk. Offset Fine

5. Trk. Gain

6. EQ Boost

0.All Servo Off

Exit: RETURN

On this screen, each item can be adjusted automatically. Select the desired number **1** to **10/0** from the remote commander, and current setting for the selected item will be displayed, then increase or decrease numeric value with the **UP** key or **DOWN** key. If CLV has been applied, the jitter is displayed for reference for the adjustment.

- 1

Focus Offset : Adjusts focus offset.
- 2

Focus Gain : Adjusts focus gain.
- 3

TRK. Offset Coarse : Adjusts tracking offset of the RF amp (IC001) side.
- 4

TRK. Offset Fine : Adjusts tracking offset of the DSP (IC401) side.
- 5

TRK. Gain : Adjusts track gain.
- 6

EQ Boost : Adjusts amount of boost of equalizer.
- 10/0

: All servo off.

2-5. EEPROM Write Adjust

EEPROM Write Adjust

1. Focus Offset

2. Focus Gain

3. Trk. Offset Coarse

4. \_\_\_\_\_

5. Trk. Gain

6. EQ Boost

0.All Servo Off

Exit: RETURN

On this screen, each item can be adjusted automatically. Select the desired number **1** to **10/0** from the remote commander, and selected item is adjusted automatically. Thus value is stored in the EEPROM.

- 1

Focus Offset : Adjusts focus offset.
- 2

Focus Gain : Adjusts focus gain.
- 3

TRK. Offset Coarse : Adjusts tracking offset of the RF amp (IC001) side.
- 5

TRK. Gain : Adjusts track gain.
- 6

EQ Boost : Adjusts amount of boost of equalizer.
- 10/0

: All servo off.

2-6. Memory Check

Display images are shown as follows, and all two screens are able to switch by the **UP** key (UP) or **DOWN** key (DW).

EEPROM Data 1/2

CD

SL

L0

L1

Focus Gain

Trk. Gain

Focus Offset

Trk. Offset

EQ. Boost

PI Level

Fcs. Balance

Jitter

Mirror Time

FE Level

Traverse Lv1.

xx

xx

xx

xx

xx

xx

--

xx

xx

xx

--

--

xx

xx

--

--

Next:DW Default:CLR Exit:RET

EEPROM Data 2/2

CDRW

DVDRW

Focus Gain

Trk. Gain

Focus Offset

Trk. Offset

EQ. Boost

xx

xx

xx

xx

xx

Next:UP Default:CLR Exit:RET

On this screen, current servo adjusted data stored in the EEPROM are displayed. The adjusted data are initialized by pressing the **CLEAR** key, but be careful that they are not recoverable after initialization.  
Before clearing the adjusted data, make a note of the set data.

### 2-7. Disc Check Memory

```

Disc Check Memory

1. SL Disc check
2. SL Disc check
3. SL Disc check

Exit: RETURN

```

On this screen, measure the mirror time of chucked disc, and write to the EEPROM.

### 2-8. Error Rate Display

```

Error Rate Display
      UC   CR  Address
PI1 Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx
PI2 Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx
P0  Err Now xx xxxx xxxxxxxx
      Max xx xxxx xxxxxxxx
      Avg xx xxxx

Exit: RETURN

```

On this screen, measure and display the error rate.

UC : Incorrect value  
CR : Correct value  
Add : Address

### 2-9. SACD Water Mark Check

```

SACD Water Mark Check

PSP AMP
PSN

Start: ENTER      Exit: RETURN

```

On this screen, measure the PSP AMP value and PSN value of SACD water mark.

### 3. MECHA AGING

On the Test Mode Menu screen, selecting **[3]** executes the aging of the mechanism deck.

```

### Aging Test MENU ###
** Pls use over 40 min.CD **
      Operation Menu

1. Open/Close Test

Exit: RETURN

```

- 1) Set over-40-min. CDs in Disc 1 to 3.
- 2) On the Aging Test MENU screen, press the **[1]** key on the remote commander to display the Open/Close Test screen.
- 3) Insert discs and press the **[ENTER]** key on the remote commander.
- 4) Is starts the aging.  
During aging, the disc number, operating status and repeat cycle are displayed. Aging can be aborted at any time by pressing the **[RETURN]** key. After the operation is stopped, press the **[RETURN]** key to return to the Aging Test MENU.

#### 4. EMERGENCY HISTORY

On the Test Mode Menu screen, selecting [4] displays the information such as servo emergency history.

The history information from last 1 up to 10 can be scrolled with the [↑] key or [↓] key. Also, specific information can be displayed by directly entering that number with ten keys.

| ### EMG. History ### |    |                |          |    |    |    |    |    |    |
|----------------------|----|----------------|----------|----|----|----|----|----|----|
| Laser Hours          |    | CD             | xxxxhxxm |    |    |    |    |    |    |
|                      |    | DVD            | xxxxhxxm |    |    |    |    |    |    |
| a.                   | bb | xx             | xx       | xx | xx | xx | xx | xx | xx |
|                      |    | xx             | xx       | xx | xx | xx | xx | xx | xx |
| a.                   | bb | xx             | xx       | xx | xx | xx | xx | xx | xx |
|                      |    | xx             | xx       | xx | xx | xx | xx | xx | xx |
| Select:1-9           |    | Scroll:UP/DOWN |          |    |    |    |    |    |    |
| (1.Latest EMG.)      |    | Exit: RETURN   |          |    |    |    |    |    |    |

xxxxhxxm: The laser on total hours. Data below minutes are omitted.

a. : Error number.

bb : Error code.

xx : Not used.

#### • Clearing History Information

##### Clearing laser hours:

Press the [DVD DISPLAY] and [CLEAR] keys in this order.

Then both CD and DVD data are cleared.

##### Clearing emergency history:

Press the [DVD TOP MENU] and [CLEAR] keys in this order.

##### Initializing EEPROM data:

Press [DVD MENU] and [CLEAR] keys in this order.

The data have been initialized when “EEPROM Initialize Finished” message is displayed, press the [RETURN] key to return to the EMG. History screen.

#### • Code list of Emergency History

- 10: Communication to RF AMP (IC001) failed.
- 11: Each servo for focus, tracking, and spindle is unlocked.
- 12: Check sum error of EEPROM (IC204).
- 14: Communication to servo DSP (IC509) failed, or servo DSP (IC509) is faulty.
- 15: Communication to DVD decoder (IC701) failed, or DVD decoder (IC701) is faulty.
- 16: Communication to DSD decoder (IC801) failed, or DSD decoder (IC801) is faulty.
- 20: Initialization of sled servo failed. It is not placed in the initial position.
- 23: Sled servo operation error.
- 24: Made a request to move the sled servo to wrong position.
- 30: Tracking balance adjustment error.
- 31: Tracking gain adjustment error.
- 33: Focus bias adjustment error.
- 34: Focus gain adjustment error.
- 35: Equalizer adjustment error.
- 40: Focus servo does not operate.
- 41: With a DVD dual layer disc, focus jump failed.
- 50: CLV (spindle) servo does not operate.
- 51: Spindle does not stop.
- 60: Made a request to seek nonexistent address.
- 61: Seek error of retry more than regulated times.
- 70: Control data could not be read.
- 80: Disc reading failed.

#### 5. MECHA ERROR HISTORY

On the Test Mode Menu screen, selecting [5] displays the information of mechanism deck error history.

The history information from last 1 up to 8 can be scrolled with the [↑] key or [↓] key.

| ### Mecha Error History ### |    |                |    |    |    |    |    |    |  |
|-----------------------------|----|----------------|----|----|----|----|----|----|--|
| 1.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 2.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 3.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 4.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 5.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 6.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 7.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
| 8.                          | aa | bb             | cc | dd | ee | xx | xx | xx |  |
|                             |    | Scroll:UP/DOWN |    |    |    |    |    |    |  |
| (1.Latest Err.)             |    | Exit: RETURN   |    |    |    |    |    |    |  |

aa : Initialization is completed or not.

FF : Complete.

other number : Not complete.

bb : Operating status of mechanism deck at an error occurred.

(lod sq jcp)

00 : Initializing.

10 to 15 : Open operating.

16 to 19 : Kicking cause open failed.

1A to 1F : Open operating.

20 to 27 : Complete the open operation.

28 : No disc and complete the open operation.

29 to 2F : Complete the open operation.

30 to 3F : Close requesting.

40 to 4F : Open requesting.

50 to 5F : Close operating.

60 to 6F : Complete the chucking operation.

80 to 8F : Complete the release operation.

(BU is home position)

90 to 9F : BU down operating.

A0 to AF : Opening/closing the shutter. Or stationary state in open/close the shutter is enablement.

B0 to BF : BU up requesting.

C0 to CF : BU down requesting.

D0 to DF : BU upping.

E0 to EF : No disc checking in disc loading.

cc : Operating status of table at an error occurred.

(tbl sq jcp)

13 : The rotation stop position determination error of a table.

11 to 12 : The loading position determination error of a table.

dd : Operating status of mechanism deck at an error occurred.

(lod op jcp)

00 : Complete the operation.

10 to 1F : Open operating.

20 to 2F : Close operating.

30 to 3F : Release operating.

60 to 6F : Chucking operating.

70 to 7F : Kicking operating.

80 to 8F : Returning the BU to home position. (after kicking)

ee : The status of table operation. (“n” is unfixed)

(tbl op cp)

1n : Rotating in the direction of a forward.

2n : Rotating in the direction of a reverse.

## 6. VERSION INFORMATION

On the Test Mode Menu screen, selecting **[6]** displays the ROM version and region code.

The parenthesized hexadecimal number in version field is checksum value of ROM.

```

## Version Information ##

IF con.   Ver.x. xxx

SYScon.   Ver.x. xx (xxxx)
  Model    JAX-Dxx
  Region    xx
  Config    xxxxxxxx

Front End Ver.x.xx

                                Exit: RETURN

```

IF con. : The version of system controller (IC101).

SYScon. : The version of DVD system processor (IC207).

Front End: The version of mechanism controller (IC901).

## 7. VIDEO LEVEL ADJUSTMENT

On the Test Mode Menu screen, selecting **[7]** displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing the **[RETURN]** key.

## SECTION 5

### ELECTRICAL ADJUSTMENTS

**Note:**

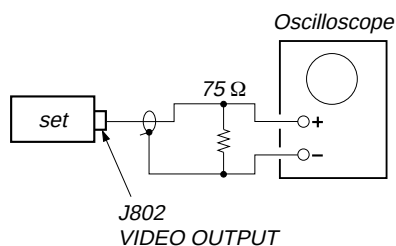
1. VIDEO board is basically designed to operate without adjustment.  
Therefore, check each item in order given.
2. Use DVD reference disc unless otherwise indicated.  
[DVD reference disc]  
TDV-520CSO (DVD-SL): PART No. J-2501-236-A  
LUV-P01 (CD): PART No. 4-999-032-01  
TDV-540C (DVD-DL): PART No. J-2501-235-A  
**Note:** Do not use exiting test disc for DVD.
3. Use an oscilloscope with more than 10M $\Omega$  impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

**AUTO SERVO ADJUSTMENT**

After parts related to the servo circuit (RF amplifier (IC001), DSP (IC401), motor driver (IC501), EEPROM (IC302) so on) are replaced, re-adjusting the servo circuit is necessary. Select "ALL" at "1. DRIVE AUTO ADJUSTMENT" (Refer to page 23 in TEST MODE) and adjust DVD-SL (single layer), CD and DVD-DL (dual layer).

**Video Level Check (VIDEO BOARD)****Purpose**

This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.

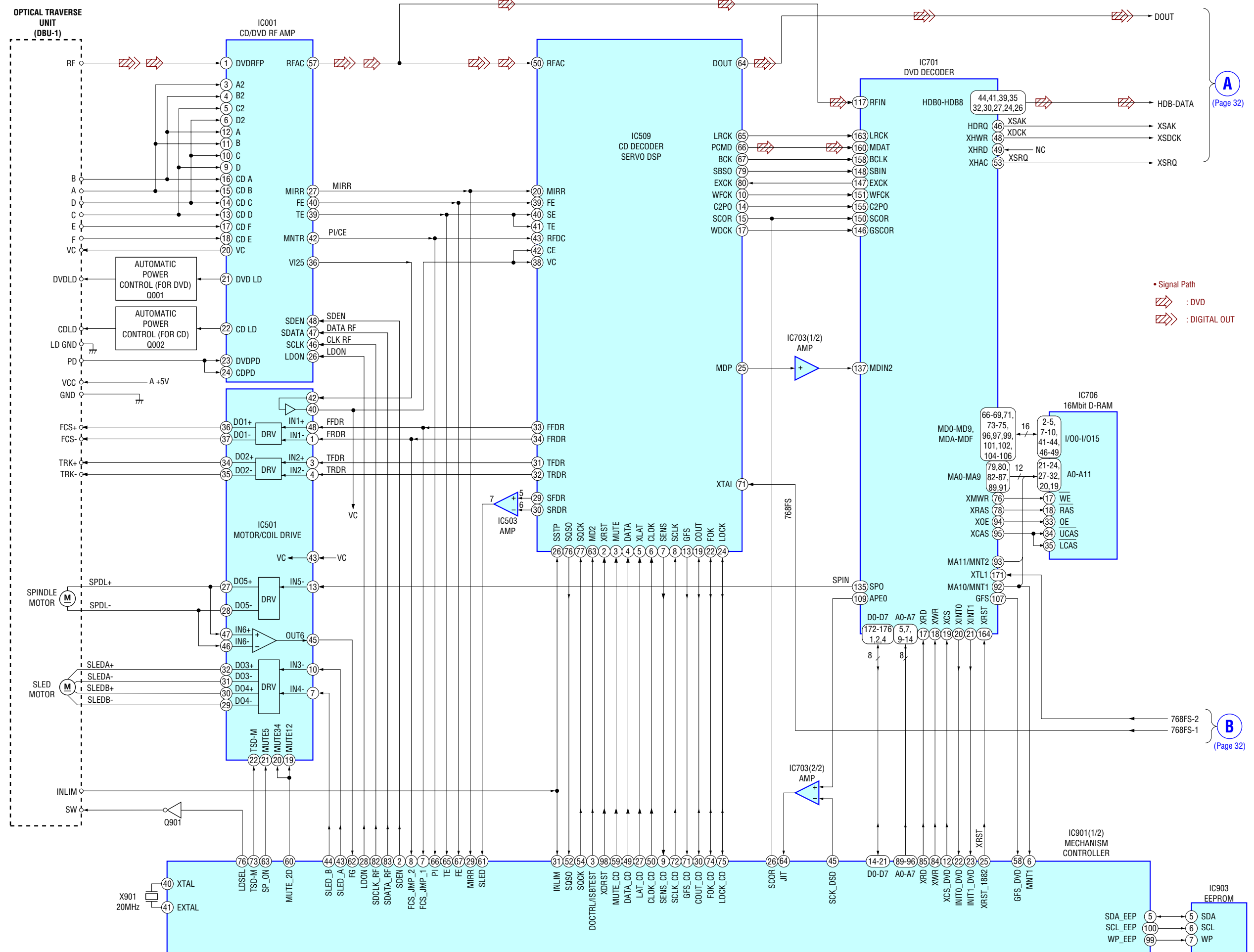
**Procedure:**

1. Connect oscilloscope to VIDEO output.
2. Load a DVD reference disc playback.
3. Check the video signal level is  $1.00 \pm 0.05$  Vp-p.

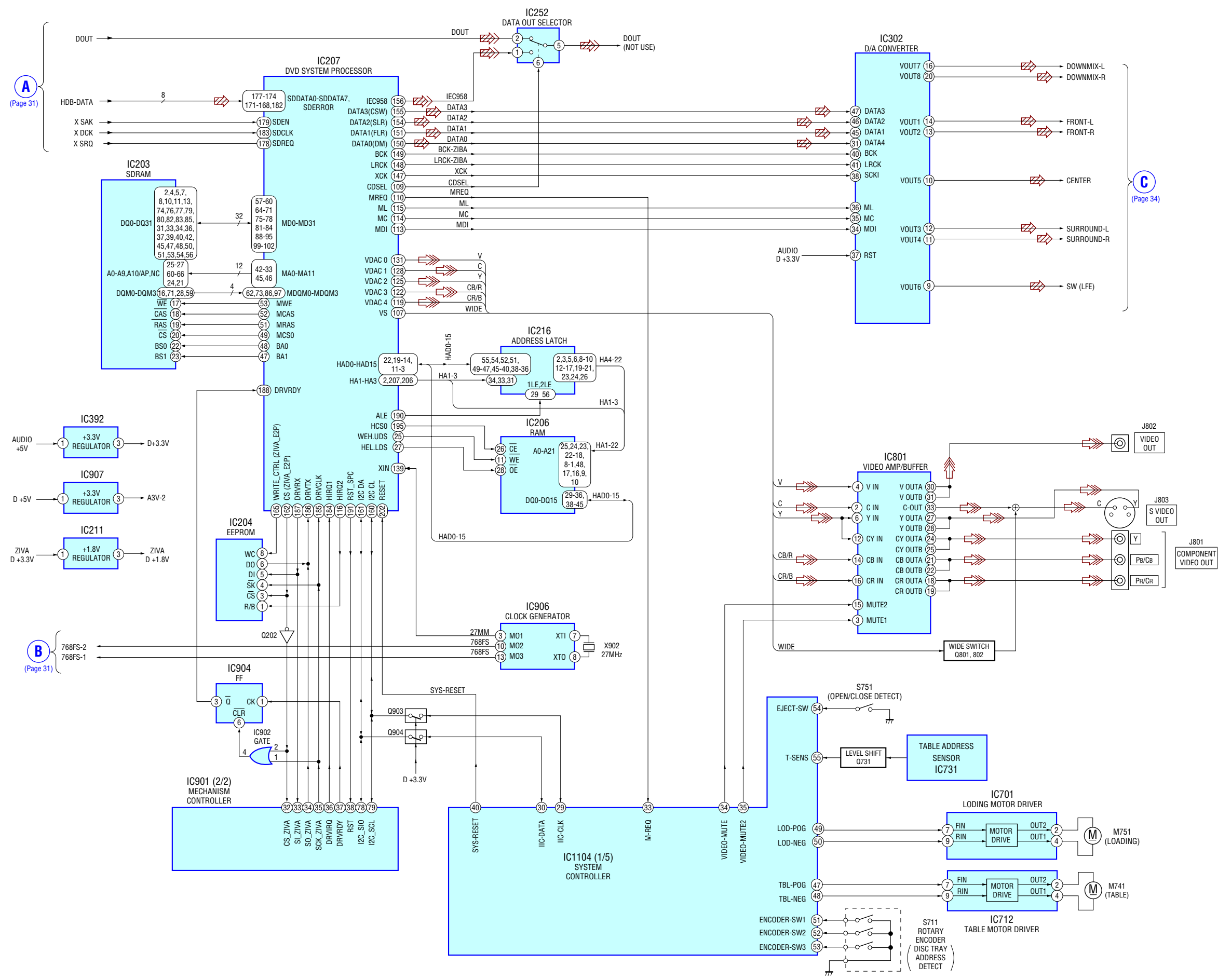


## SECTION 6 DIAGRAMS

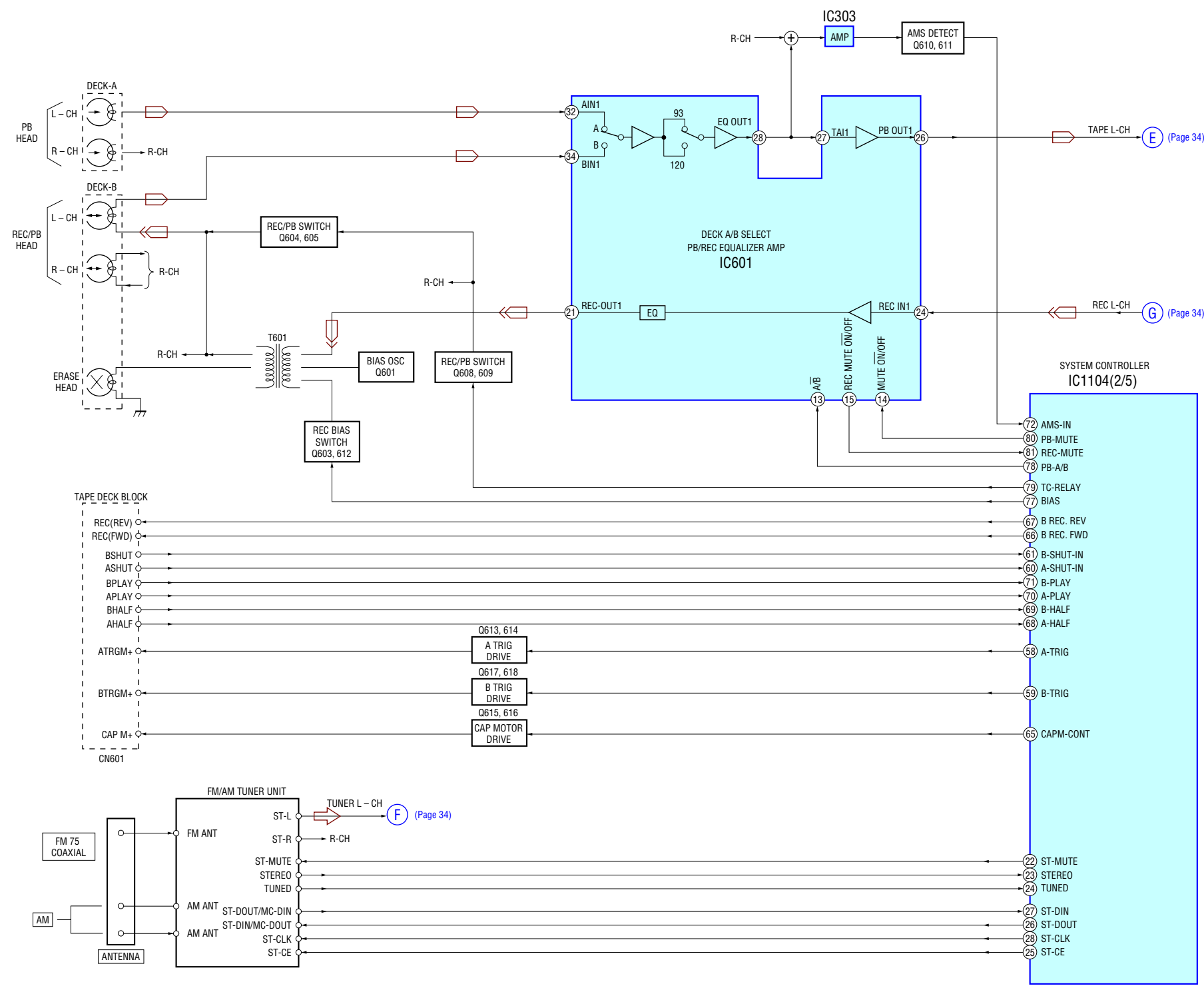
### 6-1. BLOCK DIAGRAM – DVD DSP (1/2) Section –



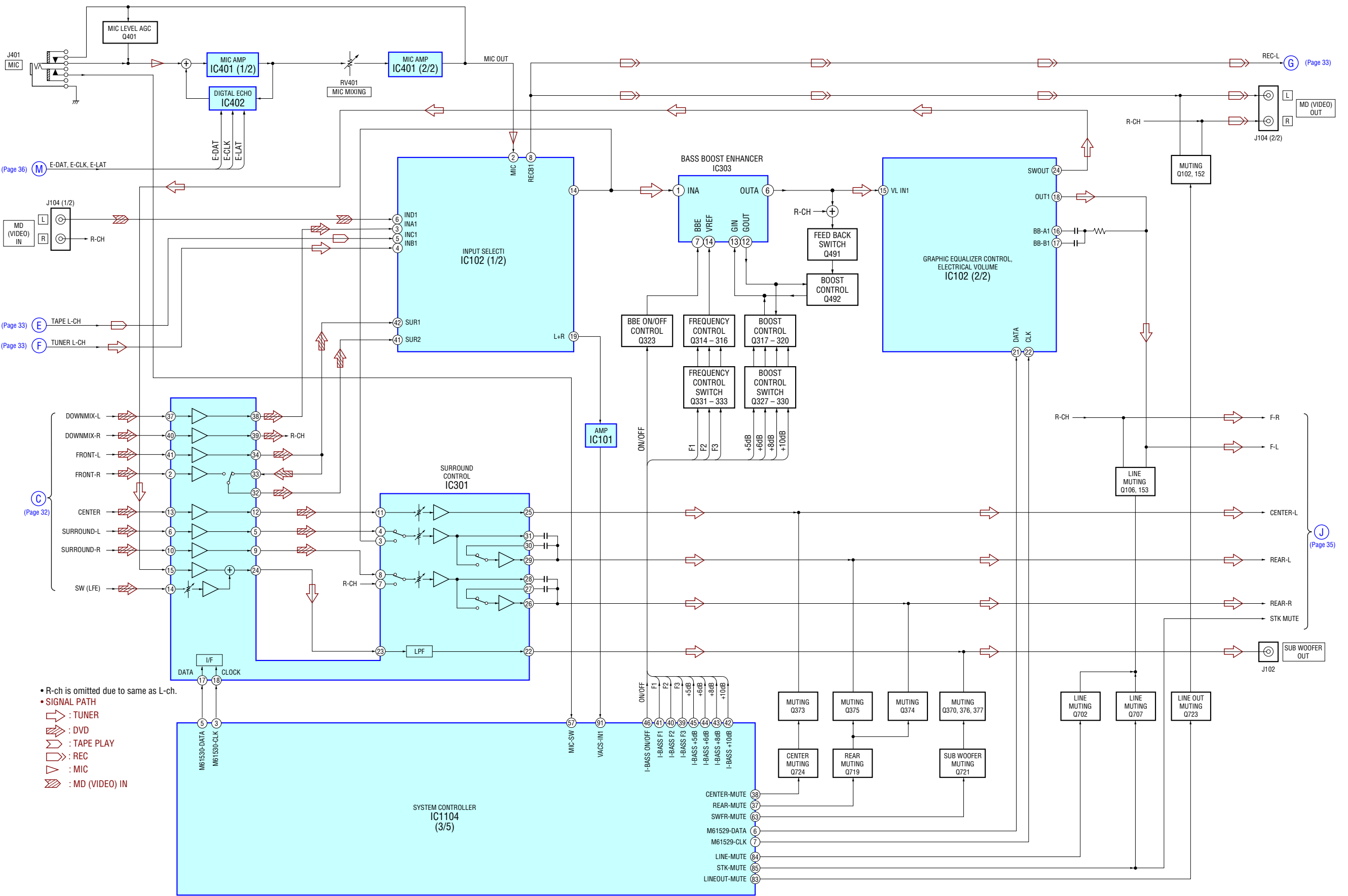
6-2. BLOCK DIAGRAM – DVD DSP (2/2) Section –



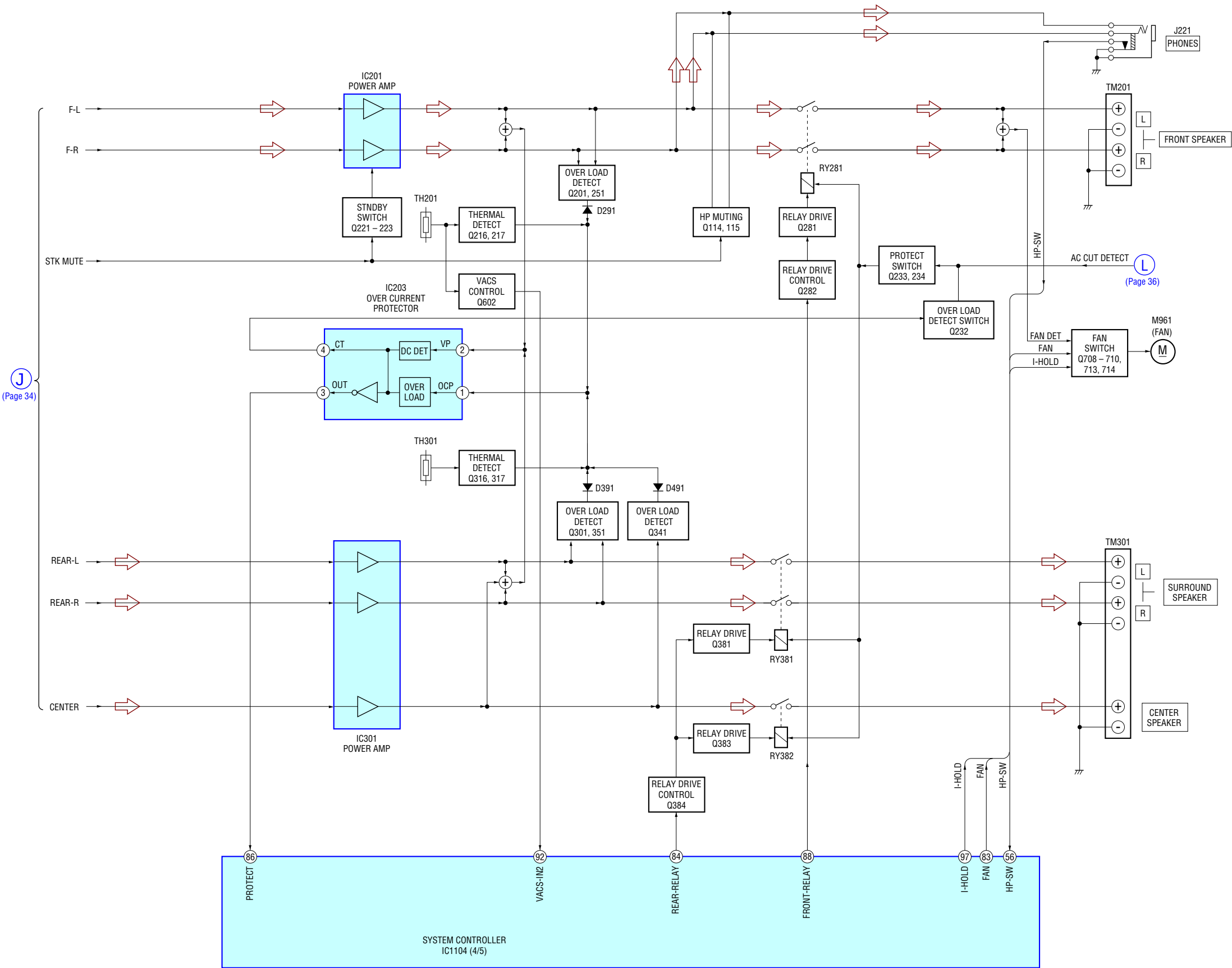
6-3. BLOCK DIAGRAM – TUNER/TAPE DECK Section –



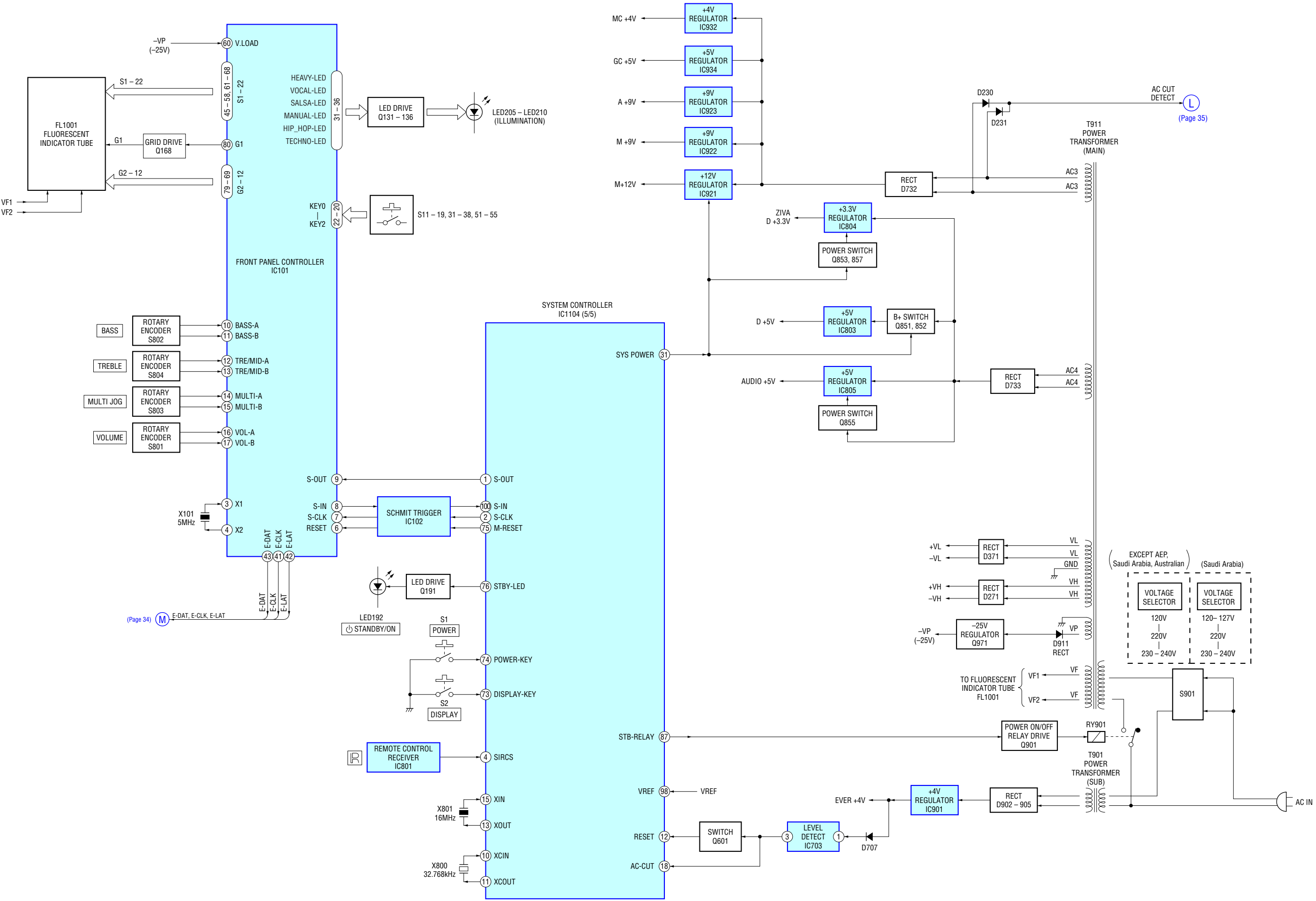
6-4. BLOCK DIAGRAM – MAIN Section –



6-5. BLOCK DIAGRAM – AMP Section –



6-6. BLOCK DIAGRAM – DISPLAY/POWER SUPPLY Section –



6-7. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

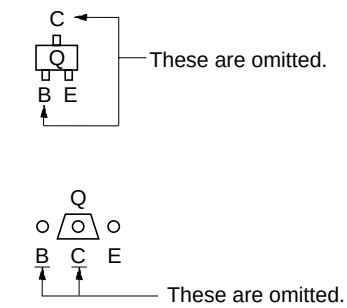
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.  
(The other layers' patterns are not indicated.)

Caution:  
Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.  
(Conductor Side)  
Parts face side: Parts on the parts face side seen from the parts face are indicated.  
(Component Side)

Caution:  
Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.  
(Side B)  
Parts face side: Parts on the parts face side seen from the parts face are indicated.  
(Side A)

- Indication of transistor.



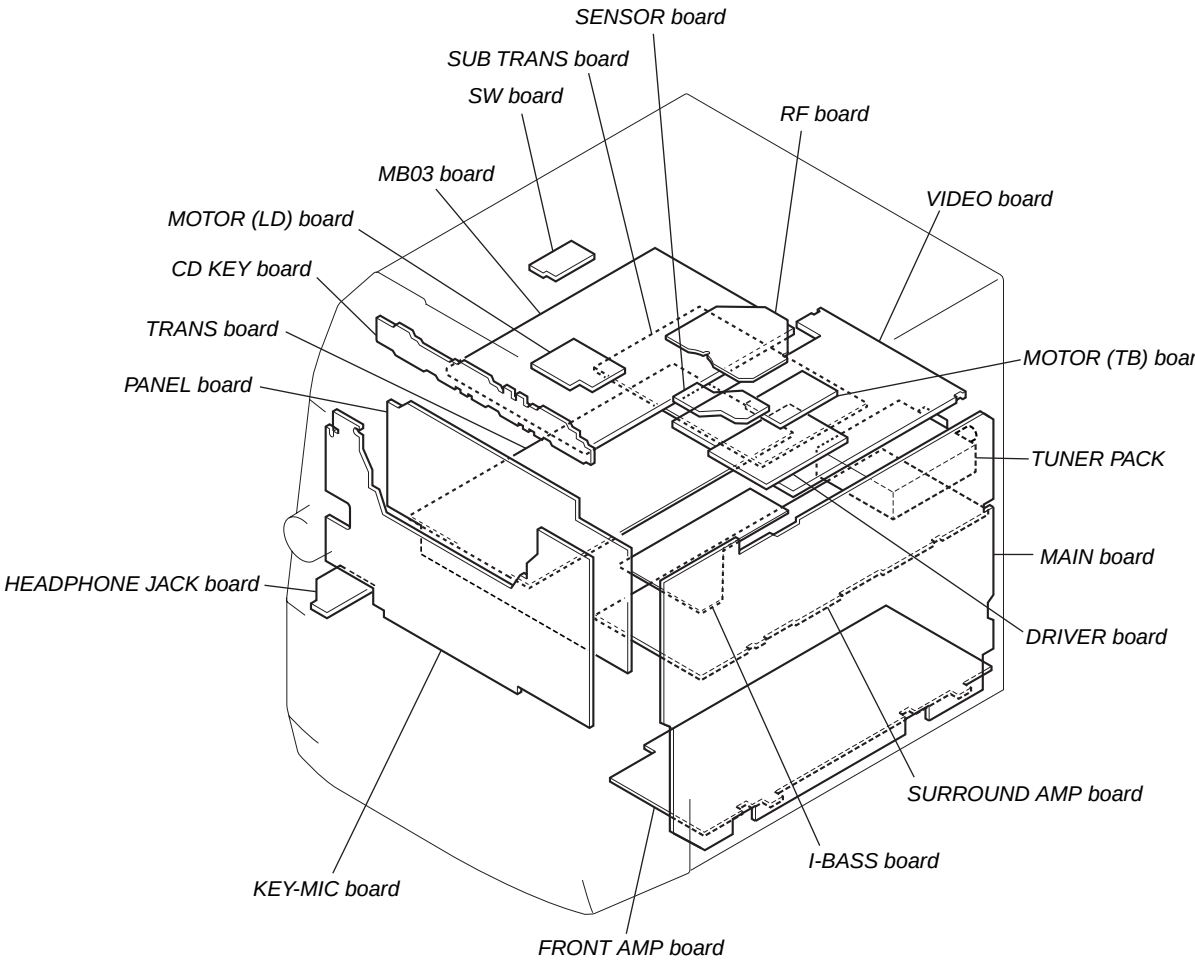
Note on Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
- $\square$  : nonflammable resistor.
- $\square$  : fusible resistor.
- $\square$  : panel designation.

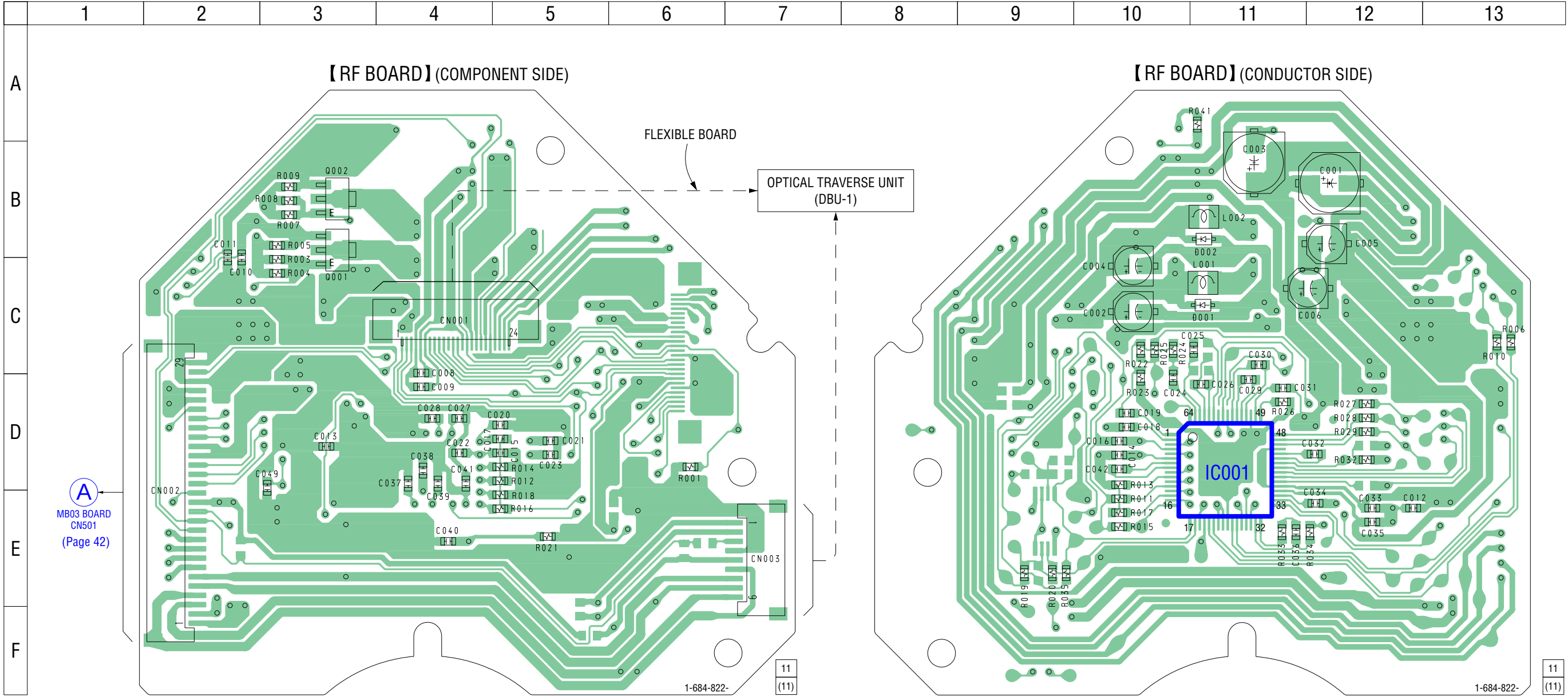
**Note:** The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

- $\text{---}$  : B+ Line.
- $\text{---}$  : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  - RF, MB, VIDEO Section –  
no mark : DVD
  - Other Sections –  
no mark : FM
  - \* : Impossible to measure
  - ( ) : DVD PLAY
  - << >> : TAPE PLAY
  - [ ] : REC
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - $\Rightarrow$  : TUNER
  - $\Rightarrow$  : TAPE PLAY
  - $\Rightarrow$  : REC
  - $\Rightarrow$  : DVD
  - $\Rightarrow$  : DIGITAL OUT
  - $\Rightarrow$  : MD (VIDEO) IN
  - $\Rightarrow$  : MIC INPUT
  - $\Rightarrow$  : VIDEO
- Abbreviation
  - AUS : Australian model
  - E51 : Chilean and Peruvian models
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - SP : Singapore model
  - TH : Thai model

• Circuit Boards Location



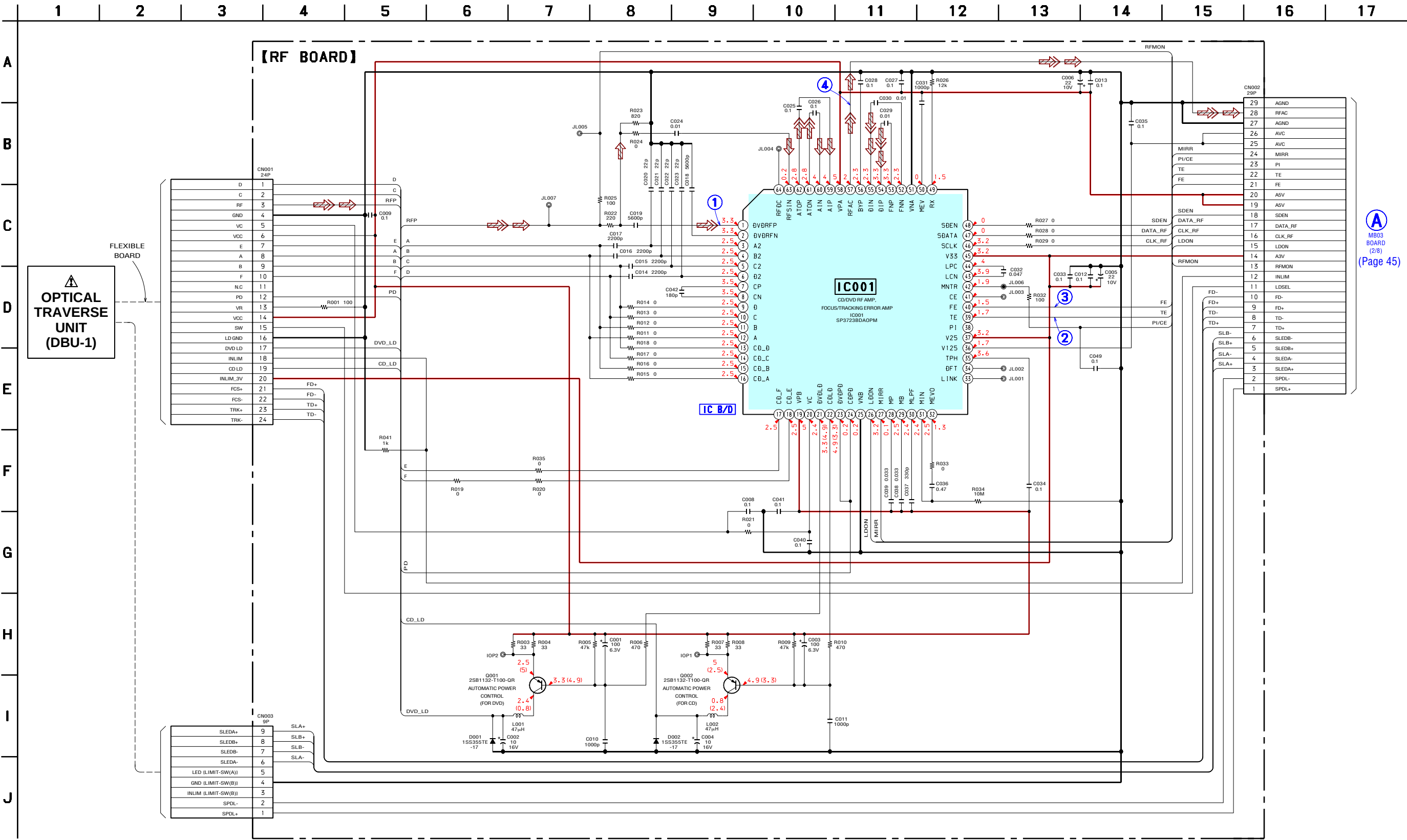
6-8. PRINTED WIRING BOARD – RF Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

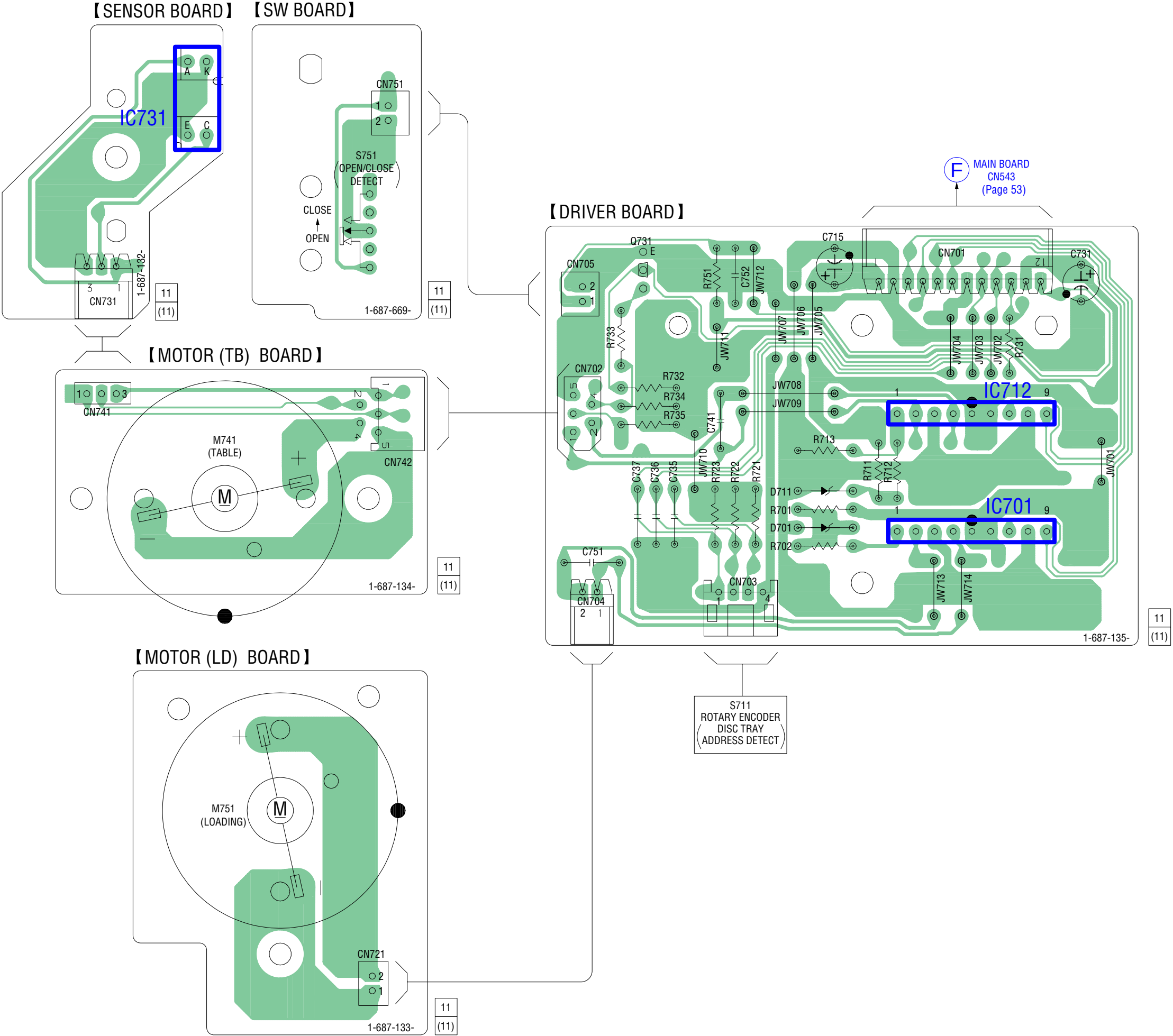
| Ref. No. | Location |
|----------|----------|
| D001     | C-11     |
| D002     | B-11     |
| IC001    | D-11     |
| Q001     | B-3      |
| Q002     | B-3      |

6-9. SCHEMATIC DIAGRAM – RF Section – • See page 52 for Waveforms. • See page 74 for IC Block Diagram.

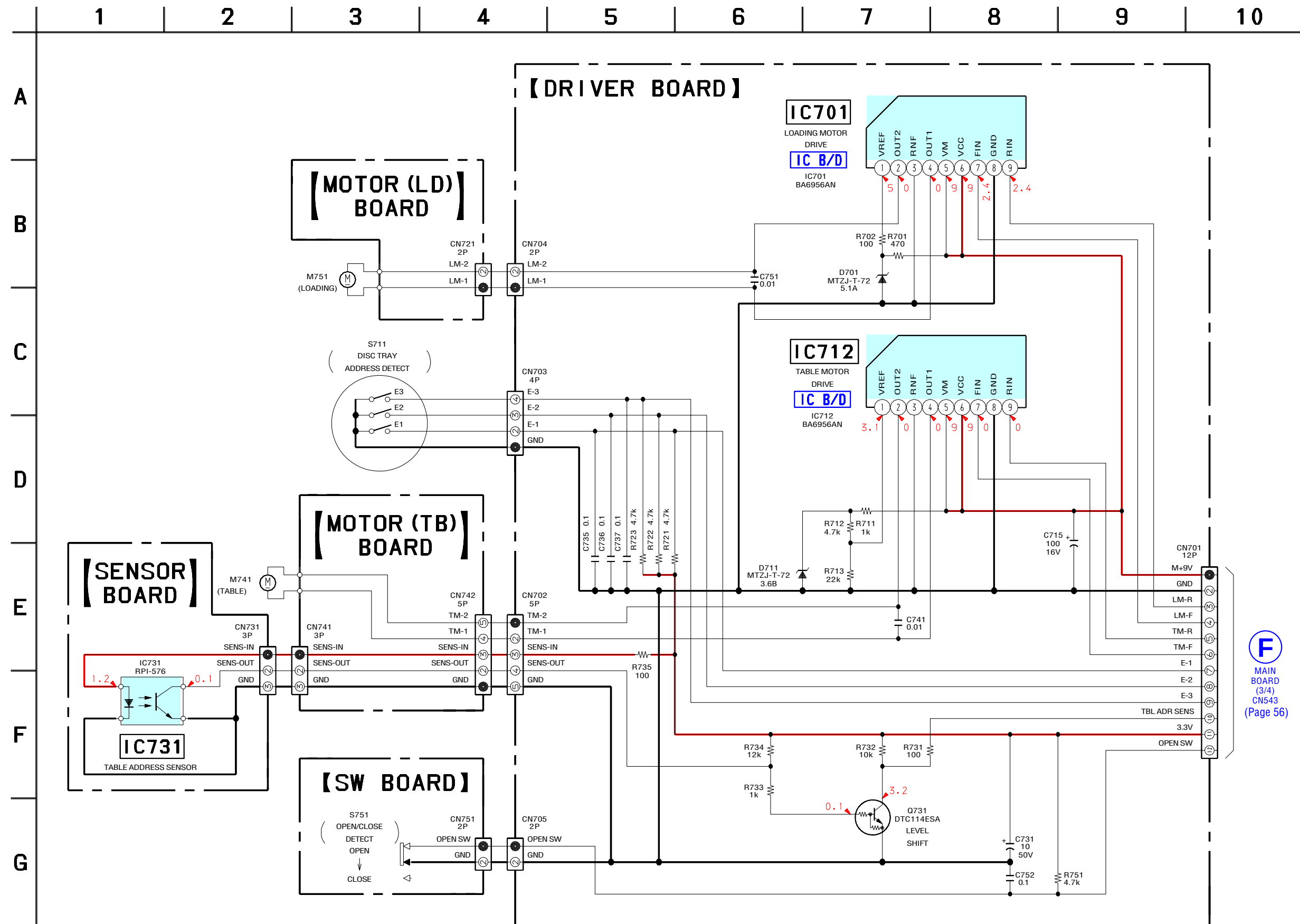


The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

6-10. PRINTED WIRING BOARDS – CHANGER Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



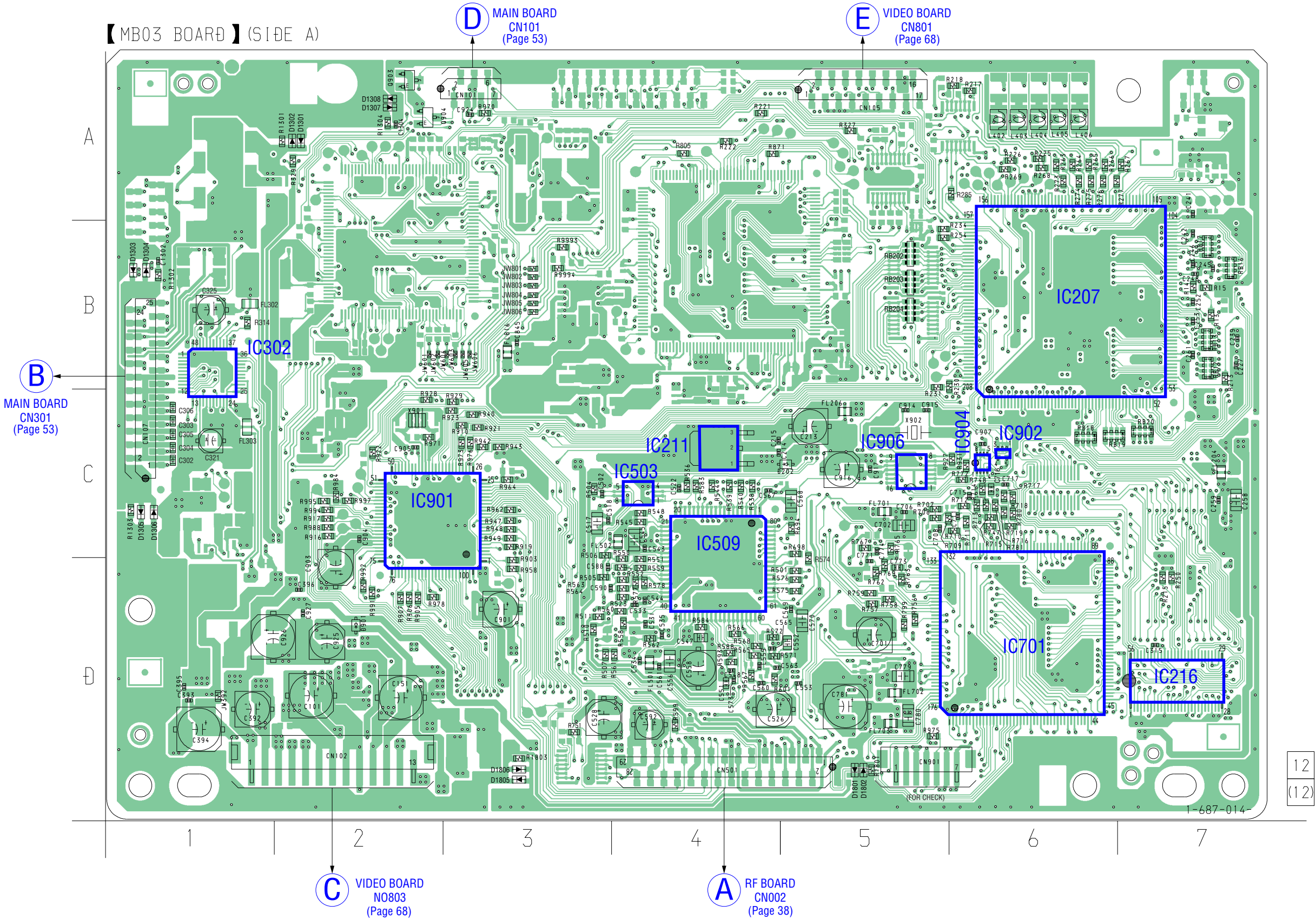
**6-11. SCHEMATIC DIAGRAM – CHANGER Section – • See page 74 for IC Block Diagrams.**



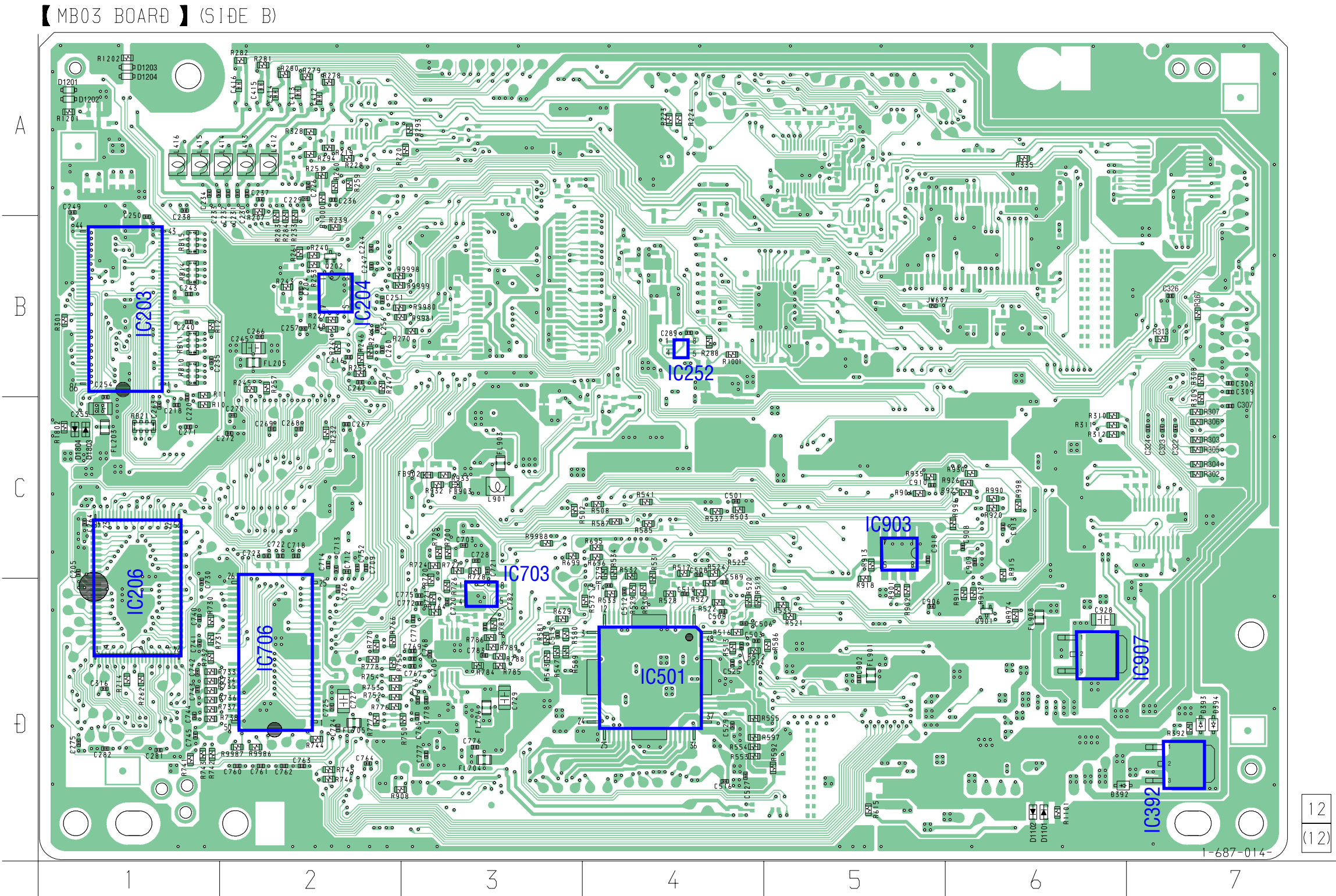
6-12. PRINTED WIRING BOARD – MB Section (Component Side) – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D202     | C-5      |
| D901     | D-2      |
| D1301    | A-2      |
| D1302    | A-2      |
| D1303    | B-1      |
| D1304    | B-1      |
| D1305    | C-1      |
| D1306    | C-1      |
| D1307    | A-2      |
| D1308    | A-2      |
| D1801    | D-5      |
| D1802    | D-5      |
| D1805    | D-3      |
| D1806    | D-3      |
| IC207    | B-6      |
| IC211    | C-4      |
| IC216    | D-7      |
| IC302    | B-1      |
| IC503    | C-4      |
| IC509    | D-4      |
| IC701    | D-6      |
| IC901    | C-2      |
| IC902    | C-6      |
| IC904    | C-6      |
| IC906    | C-5      |
| Q903     | A-2      |
| Q904     | A-2      |



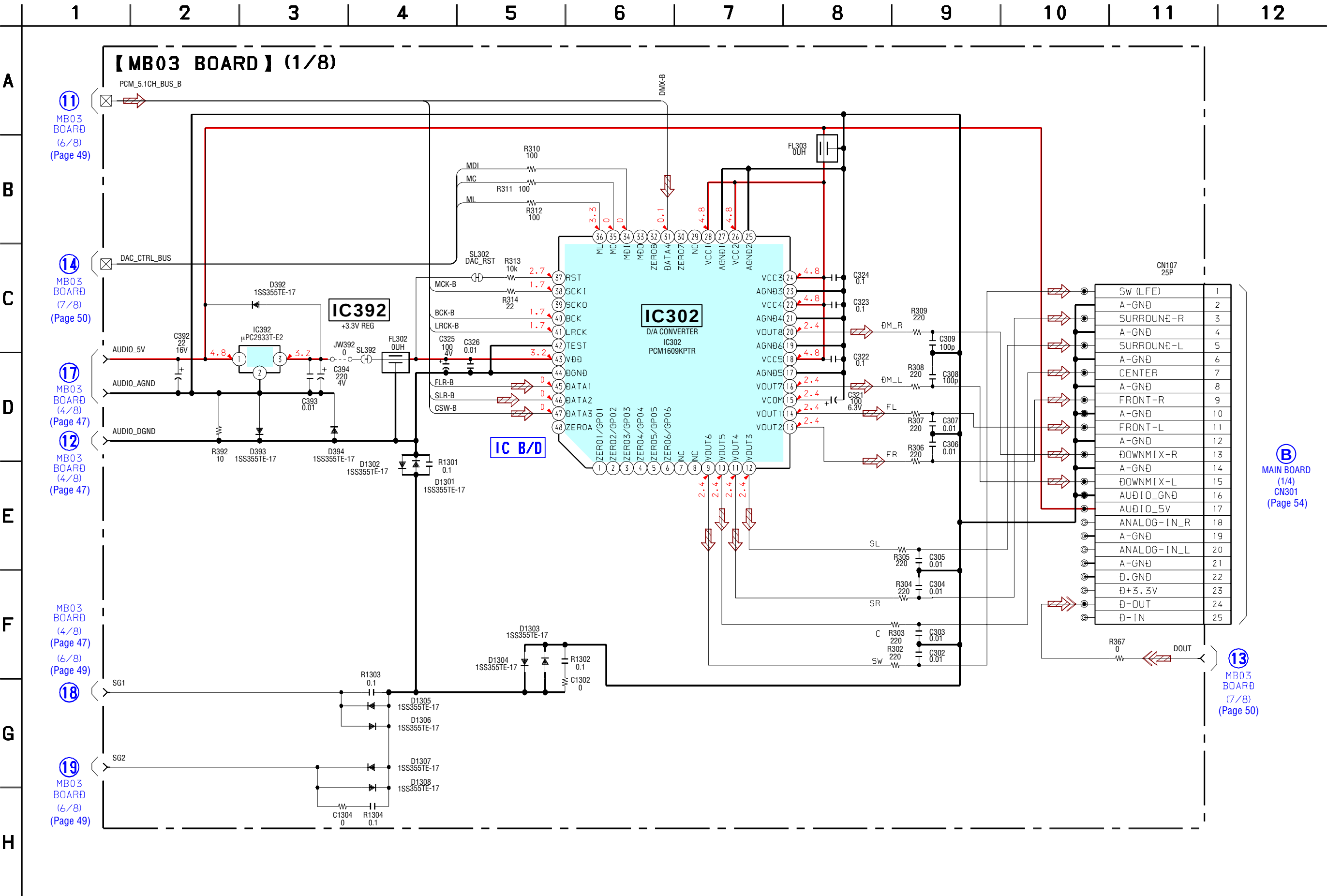
6-13. PRINTED WIRING BOARD – MB Section (Conductor Side) – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



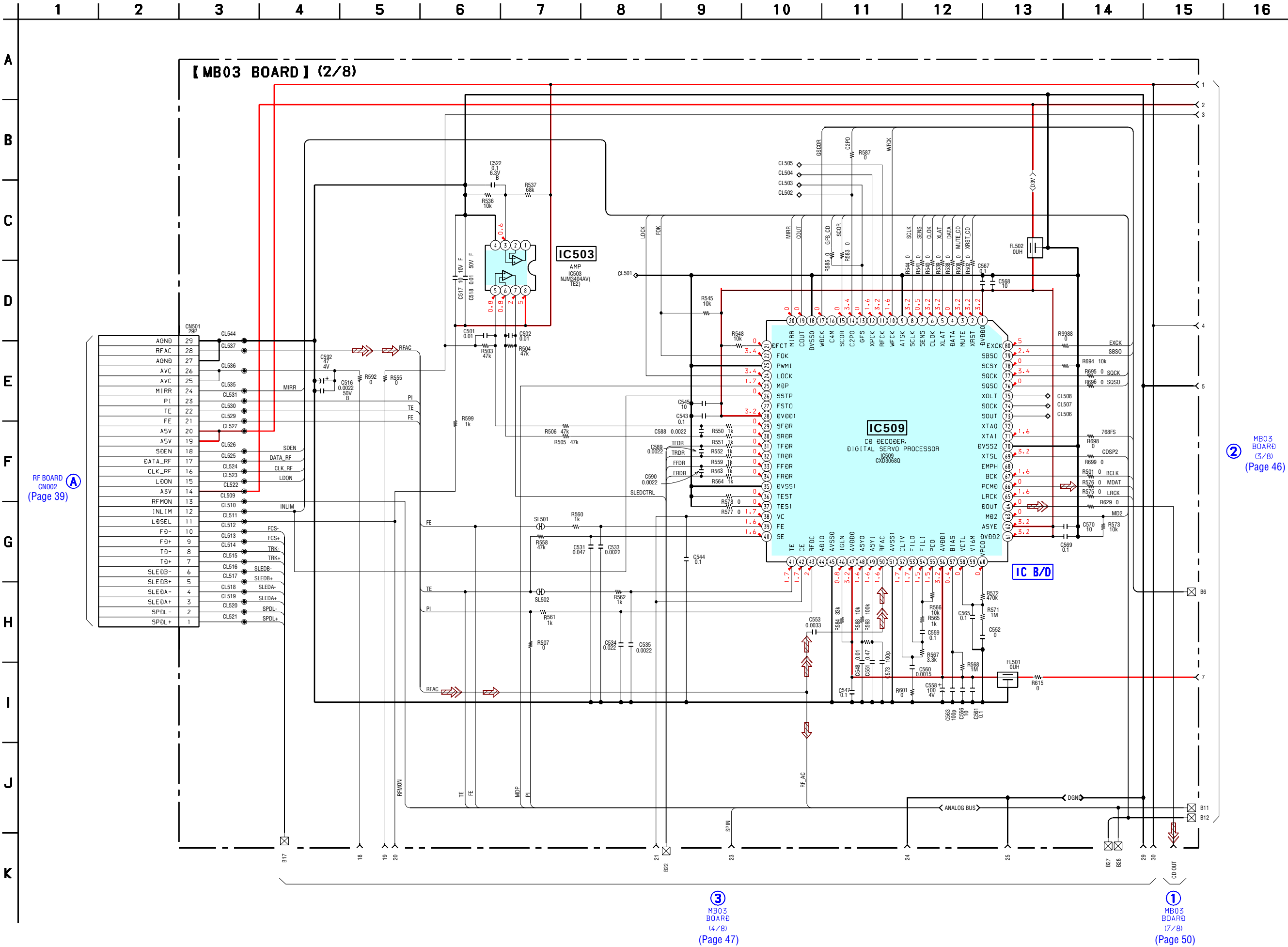
• Semiconductor Location

| Ref. No. | Location |
|----------|----------|
| D392     | D-6      |
| D393     | D-7      |
| D394     | D-7      |
| D1101    | D-6      |
| D1102    | D-6      |
| D1201    | A-1      |
| D1202    | A-1      |
| D1203    | A-1      |
| D1204    | A-1      |
| D1803    | C-1      |
| D1804    | C-1      |
| IC203    | B-1      |
| IC204    | B-2      |
| IC206    | D-1      |
| IC252    | B-4      |
| IC392    | D-7      |
| IC501    | D-4      |
| IC703    | D-3      |
| IC706    | D-2      |
| IC903    | C-5      |
| IC907    | D-6      |
| Q202     | B-2      |
| Q901     | D-6      |

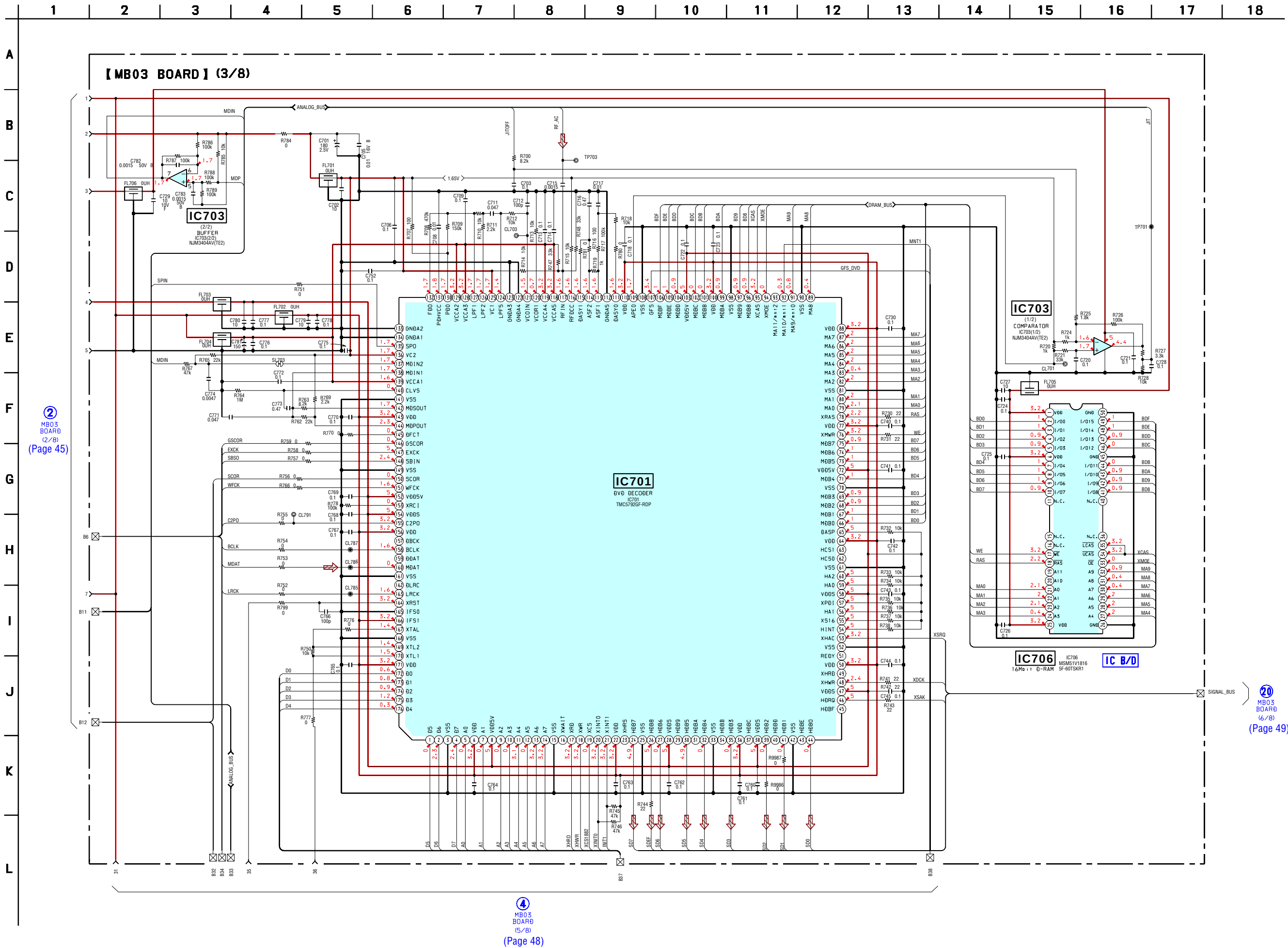
6-14. SCHEMATIC DIAGRAM – MB Section (1/8) – • See page 74 for IC Block Diagram.



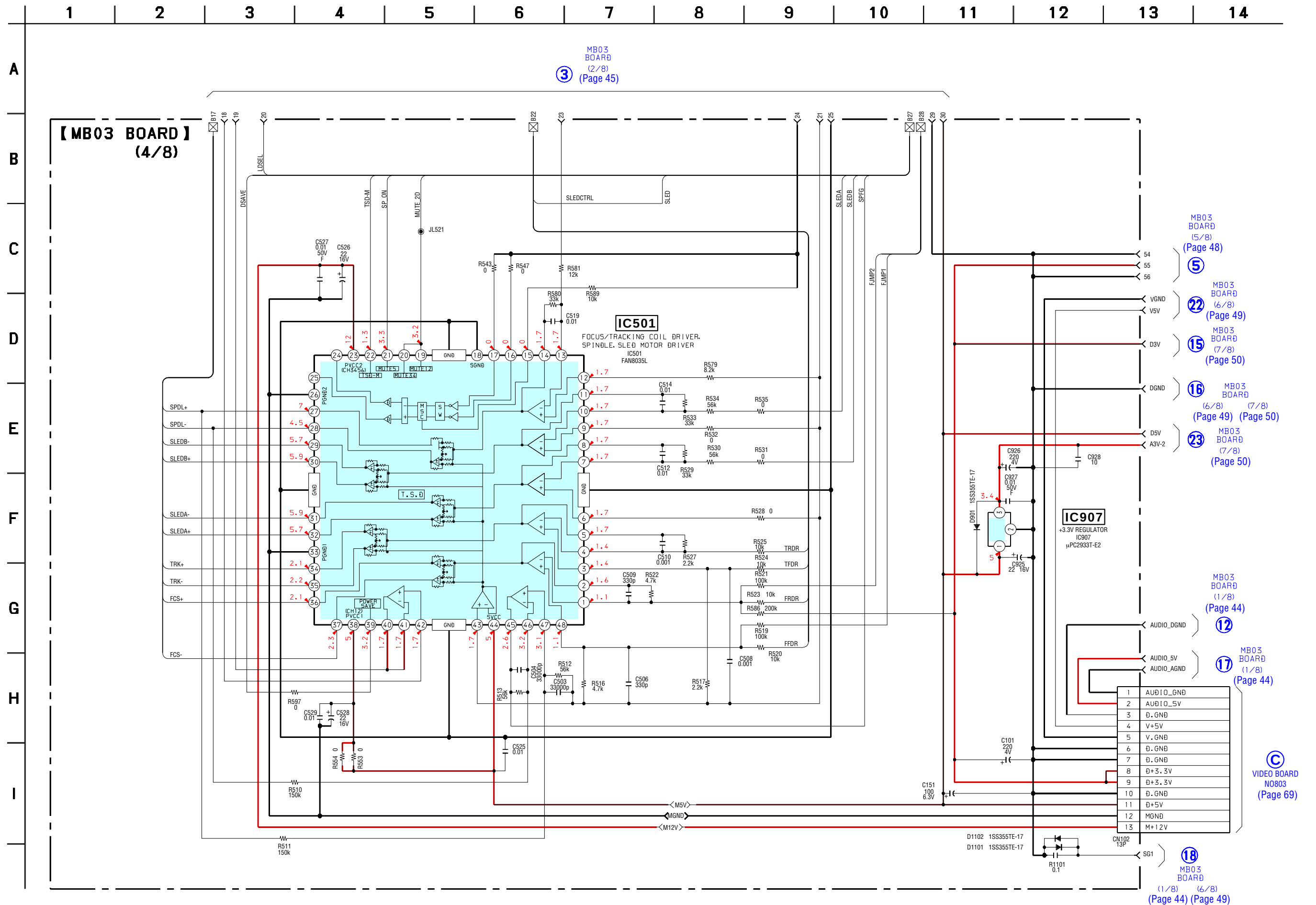
6-15. SCHEMATIC DIAGRAM – MB Section (2/8) – • See page 74 for IC Block Diagram.



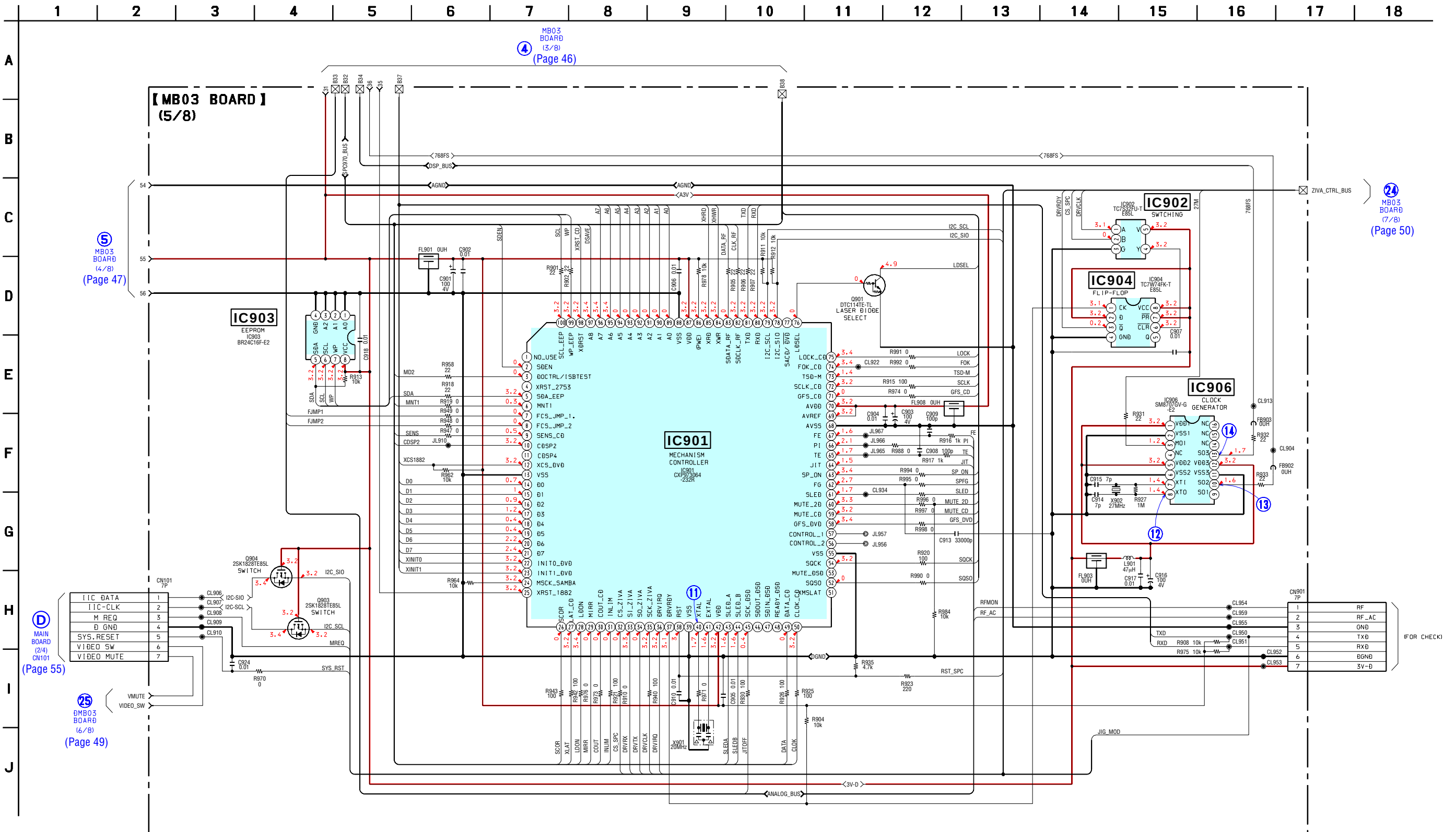
6-16. SCHEMATIC DIAGRAM – MB Section (3/8) – • See page 74 for IC Block Diagram.



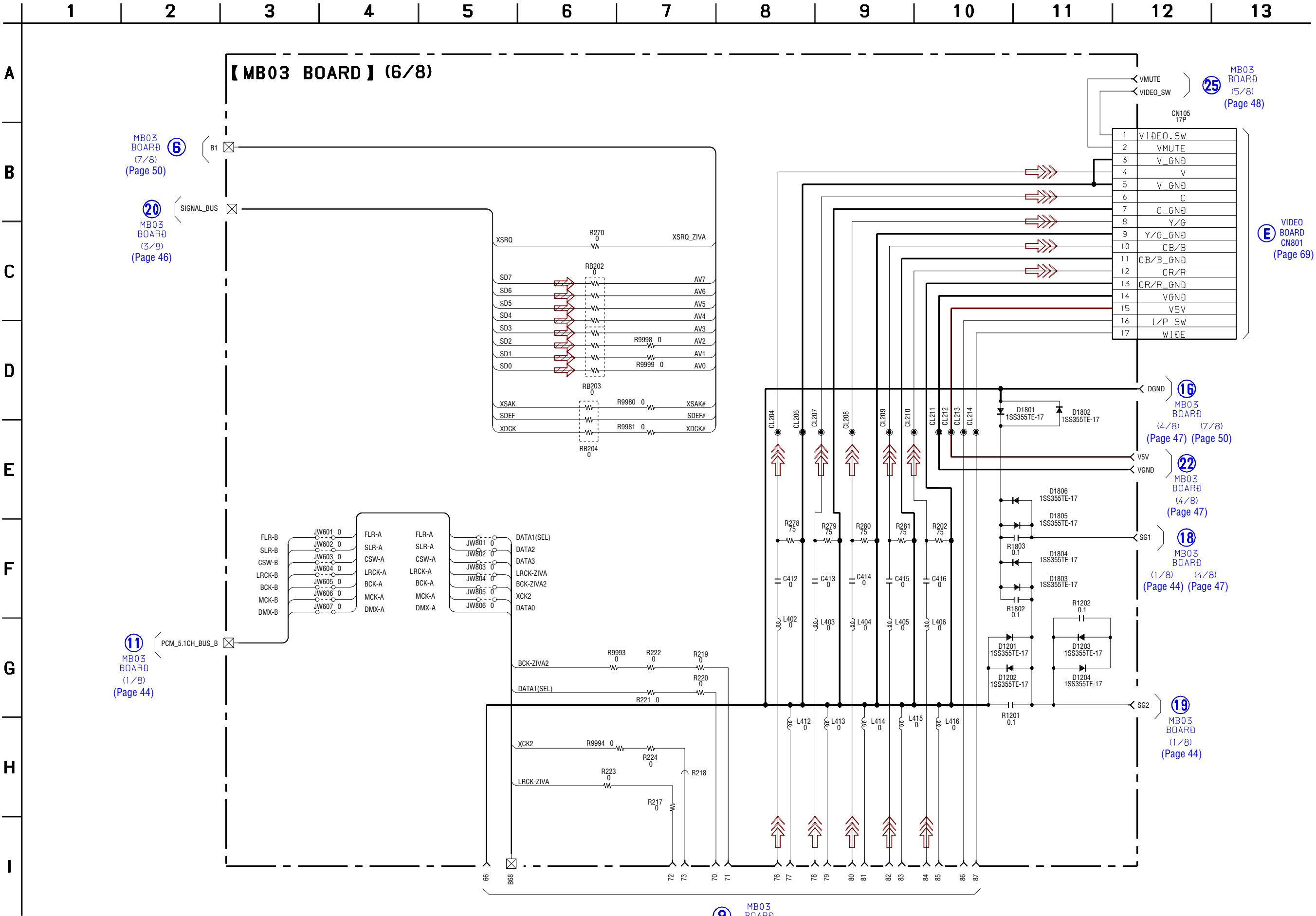
**6-17. SCHEMATIC DIAGRAM – MB Section (4/8) –**



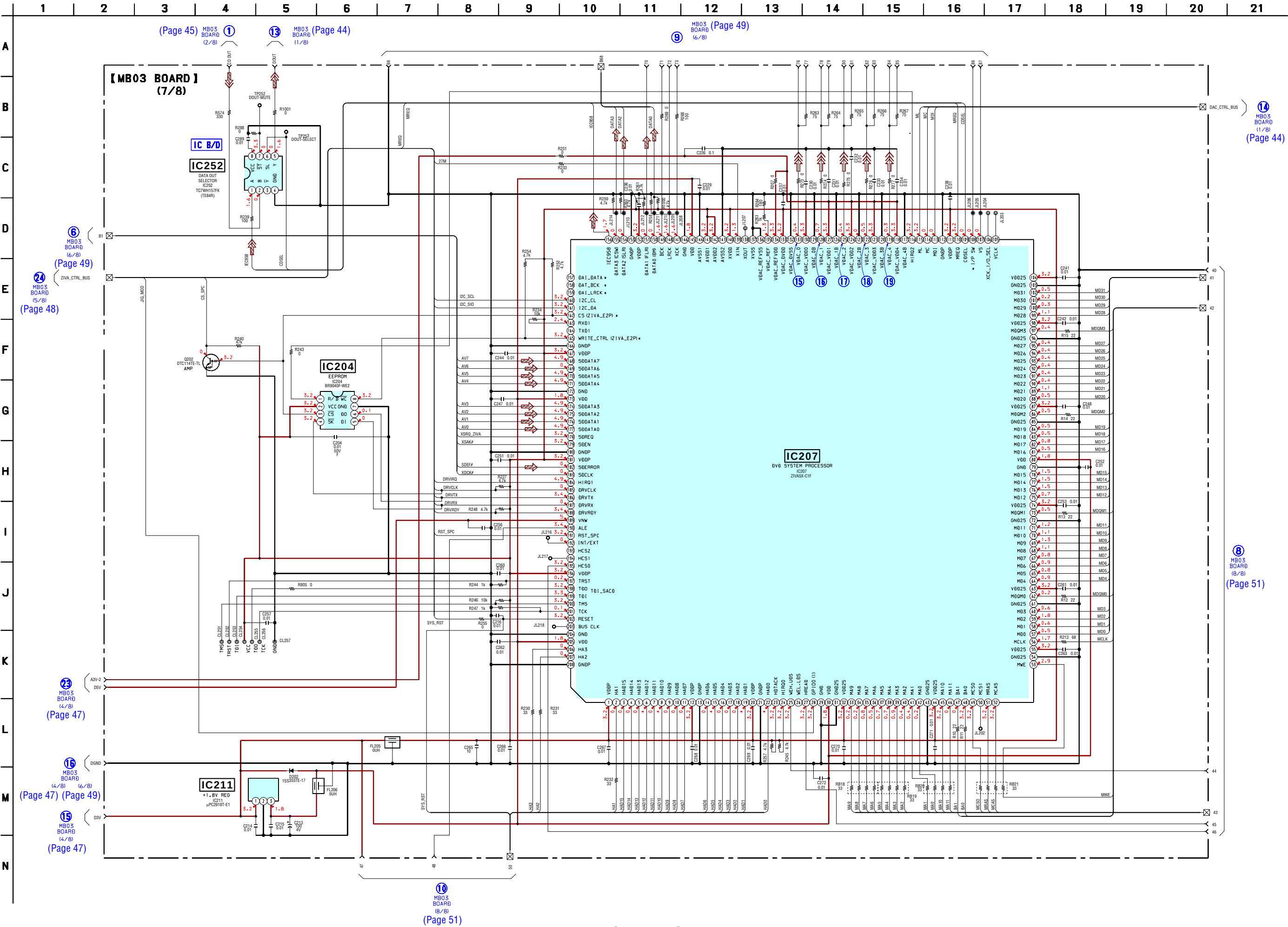
**6-18. SCHEMATIC DIAGRAM – MB Section (5/8) – • See page 52 for Waveforms. • See page 74 for IC Block Diagrams.**



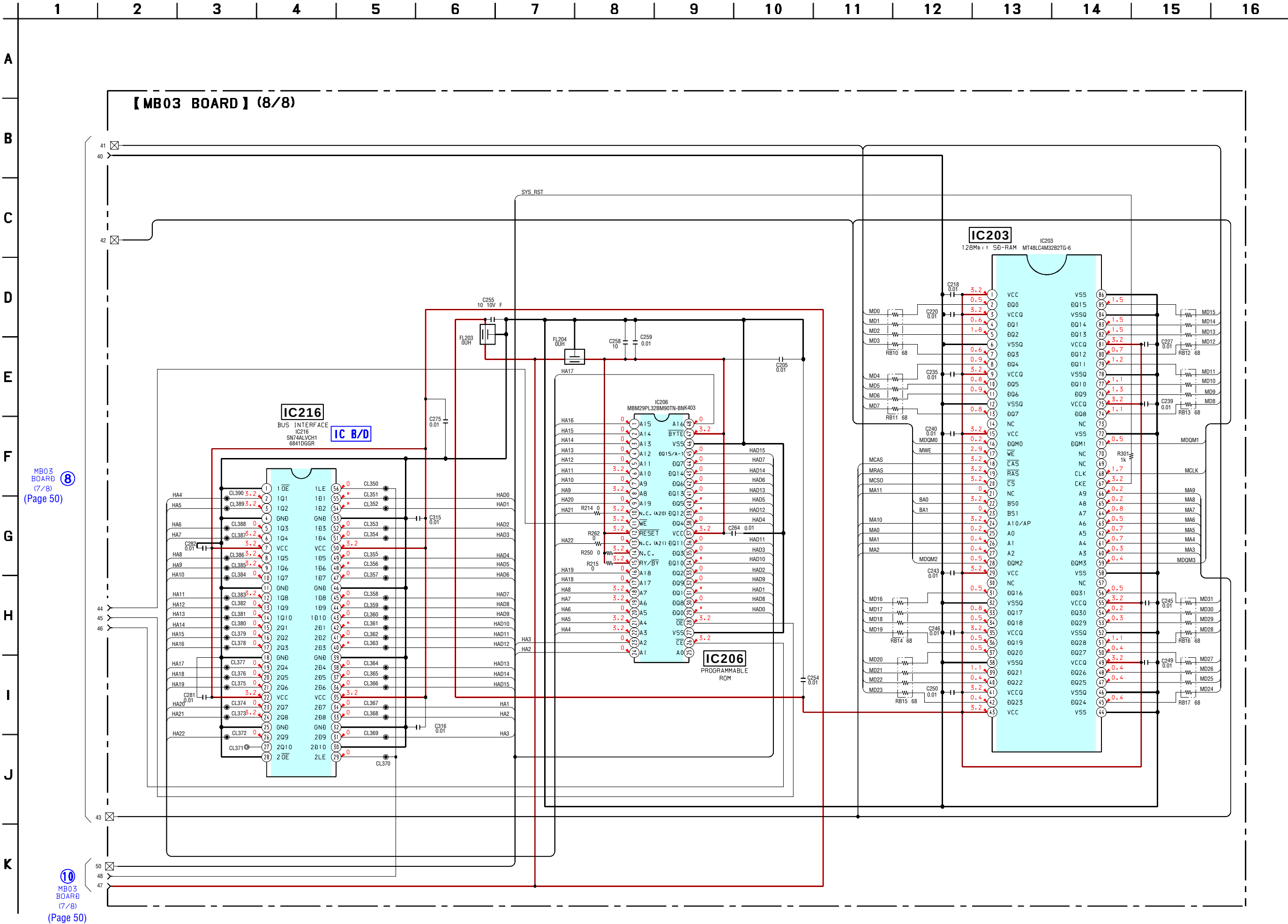
6-19. SCHEMATIC DIAGRAM – MB (6/8) Section –



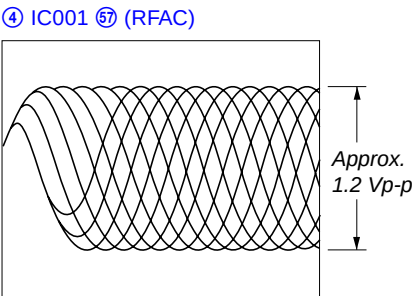
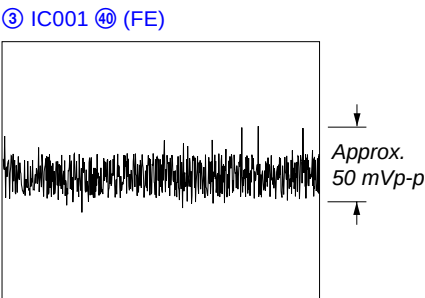
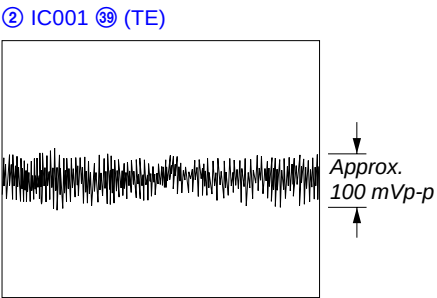
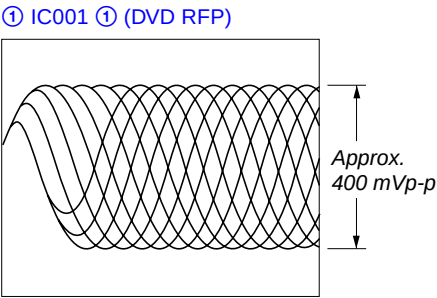
6-20. SCHEMATIC DIAGRAM – MB Section (7/8) – • See page 52 for Waveforms. • See page 74 for IC Block Diagram.



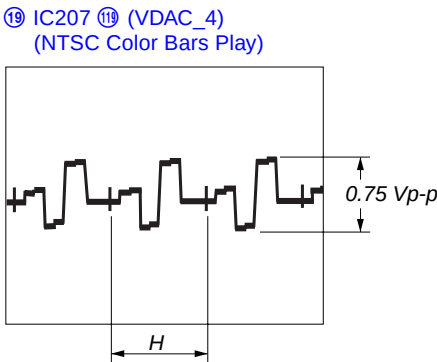
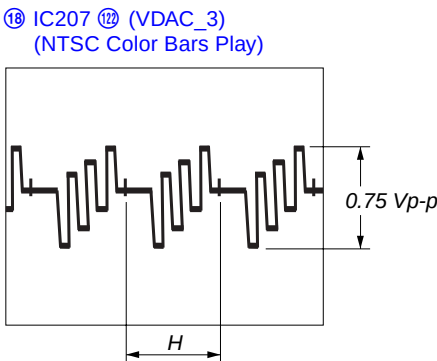
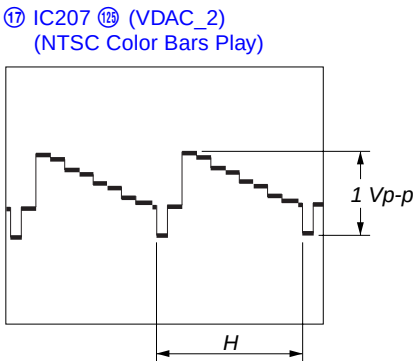
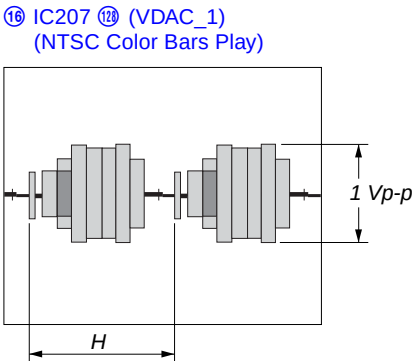
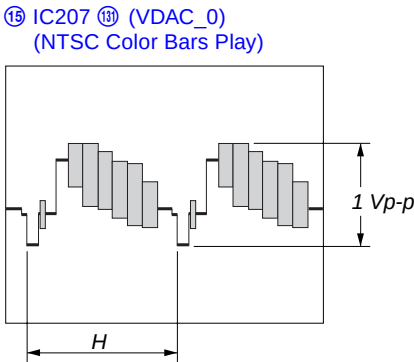
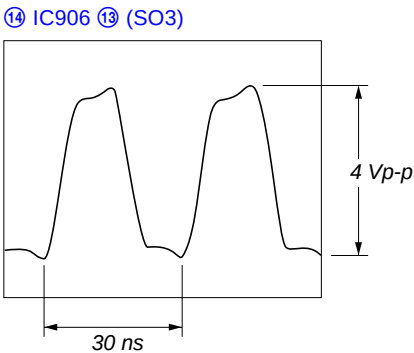
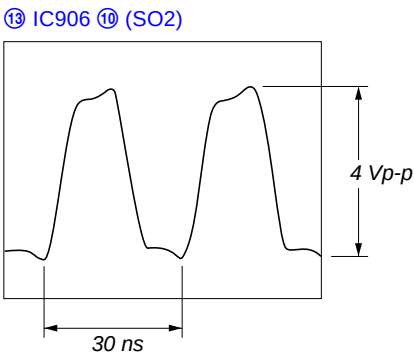
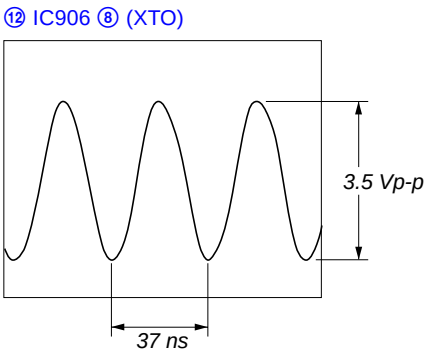
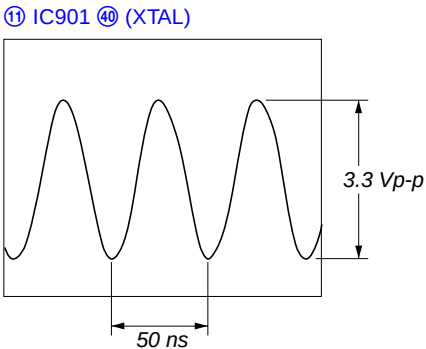
6-21. SCHEMATIC DIAGRAM – MB Section (8/8) – • See page 74 for IC Block Diagram.



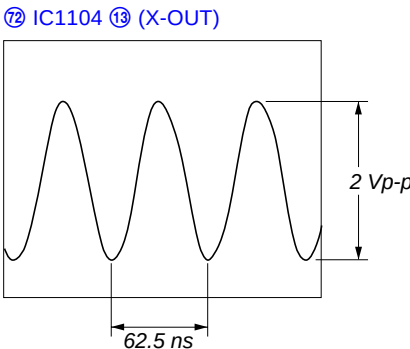
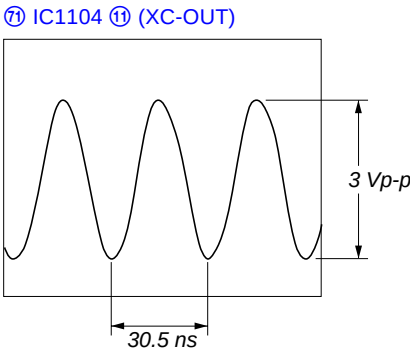
• Waveforms  
– RF Board –



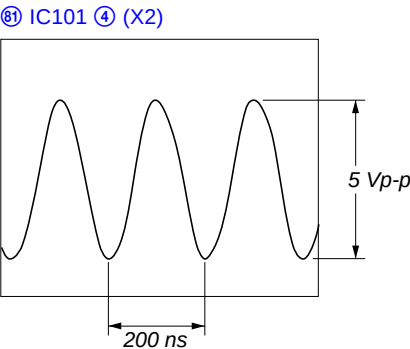
– MB03 Board –



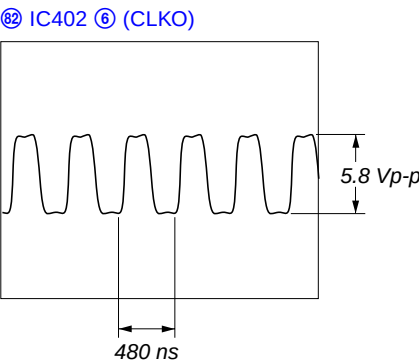
– MAIN Board –



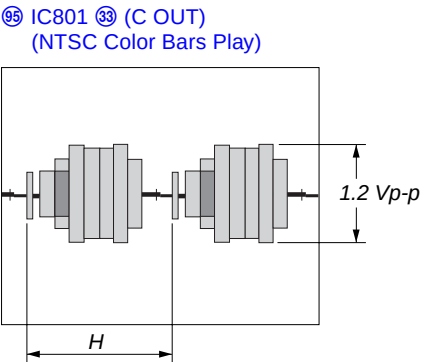
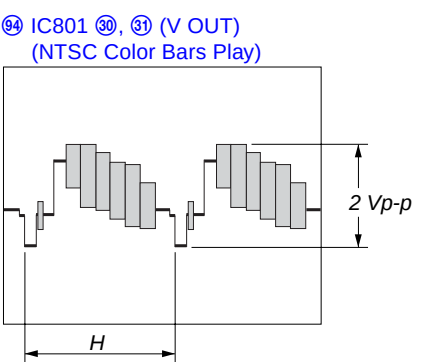
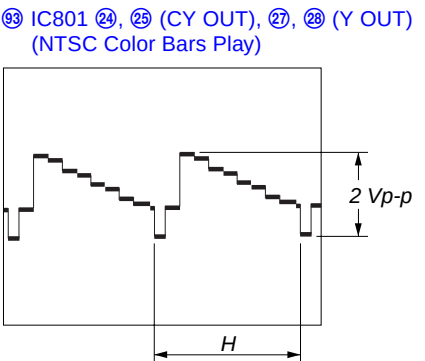
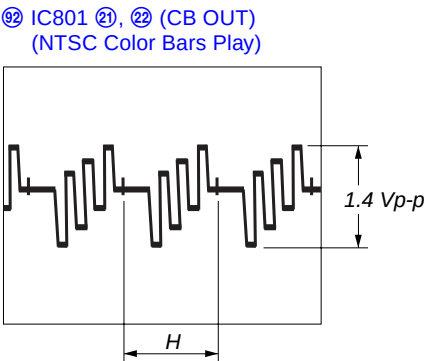
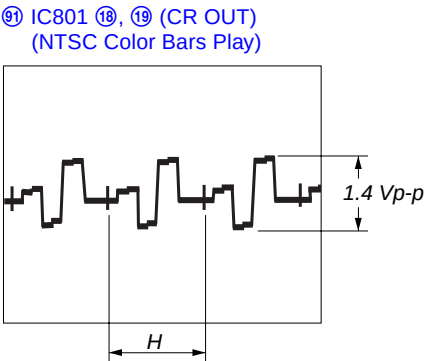
– PANEL Board –



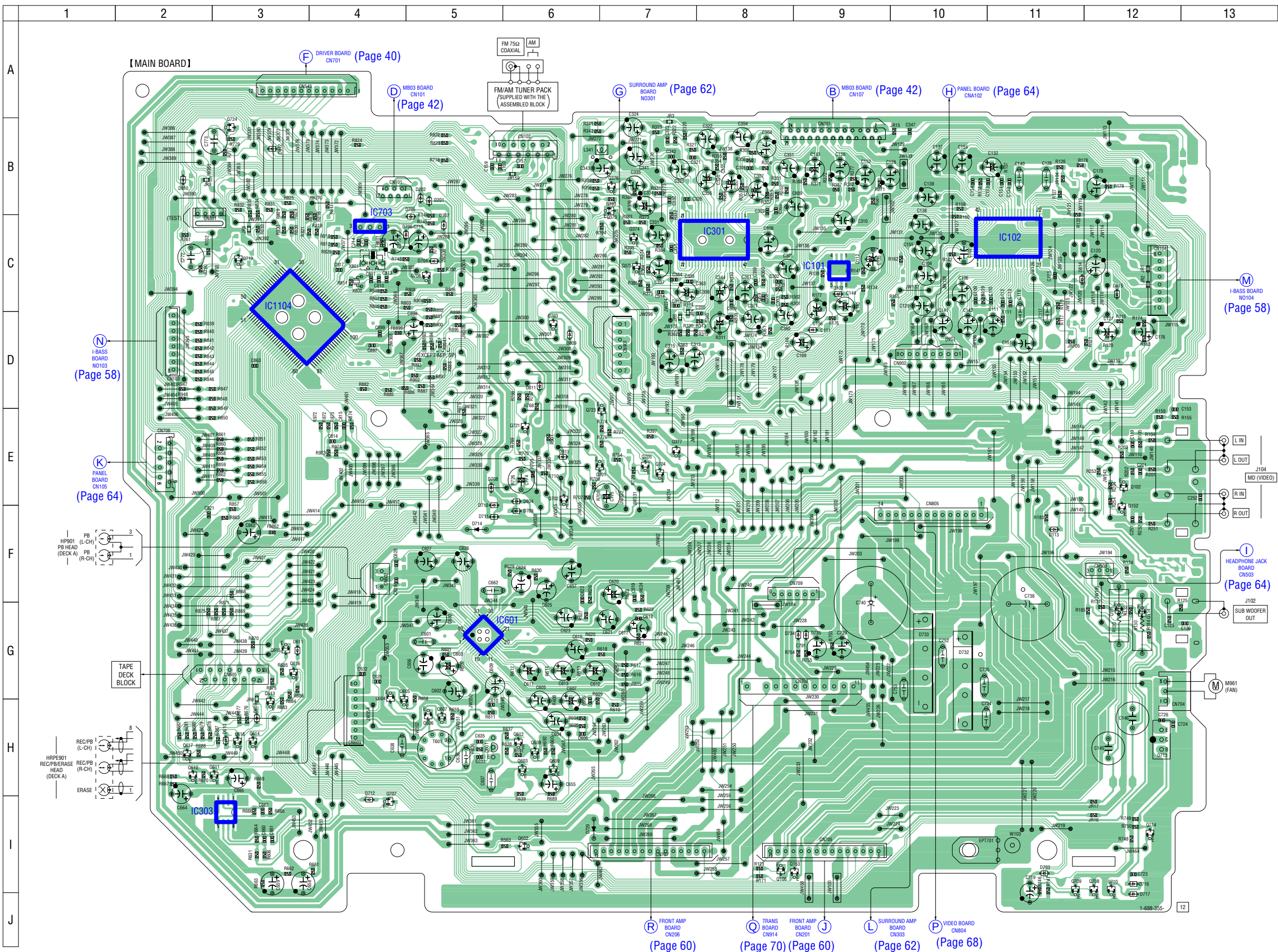
– KEY-MIC Board –



– VIDEO Board –



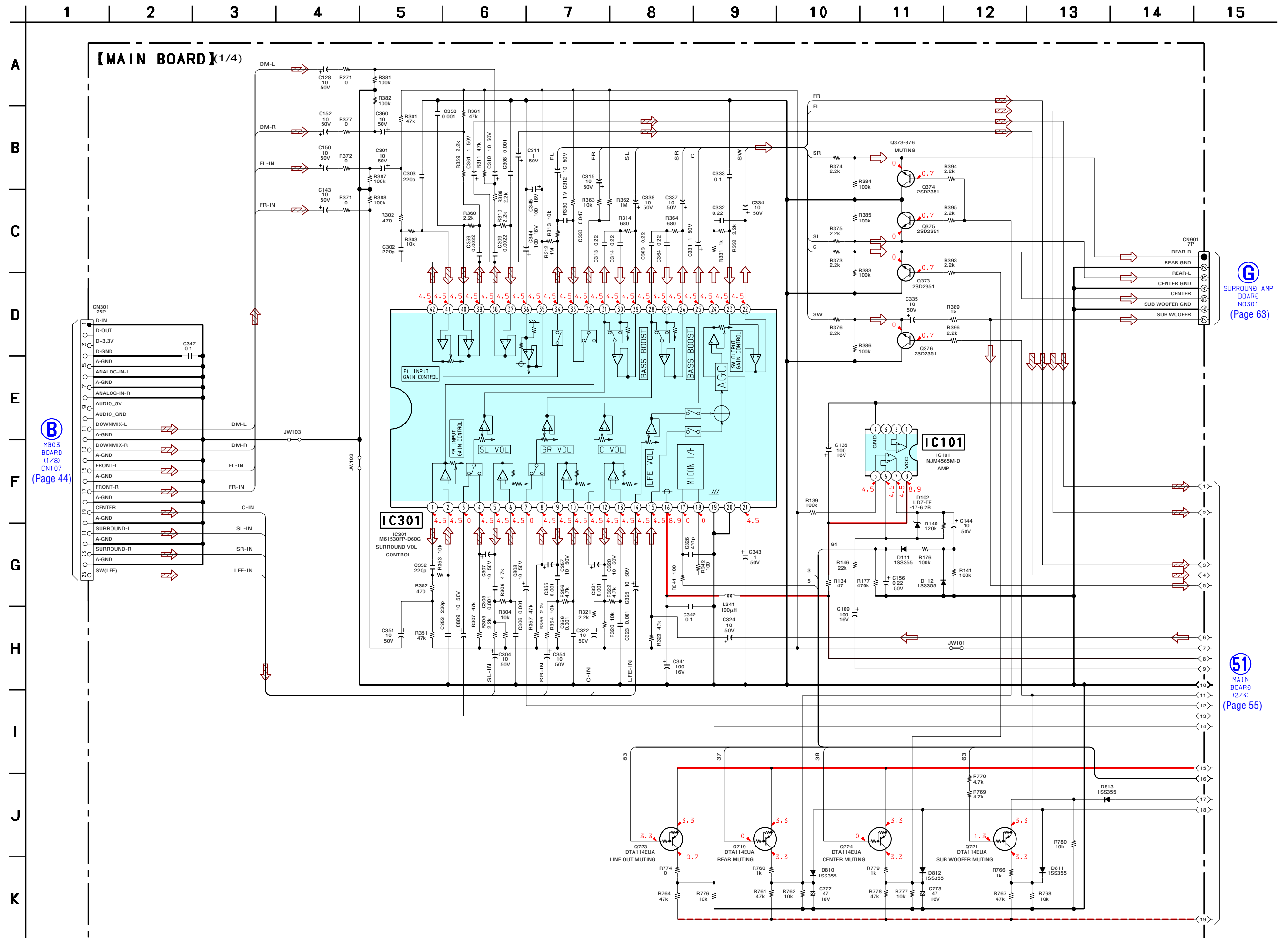
6-22. PRINTED WIRING BOARD – MAIN Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



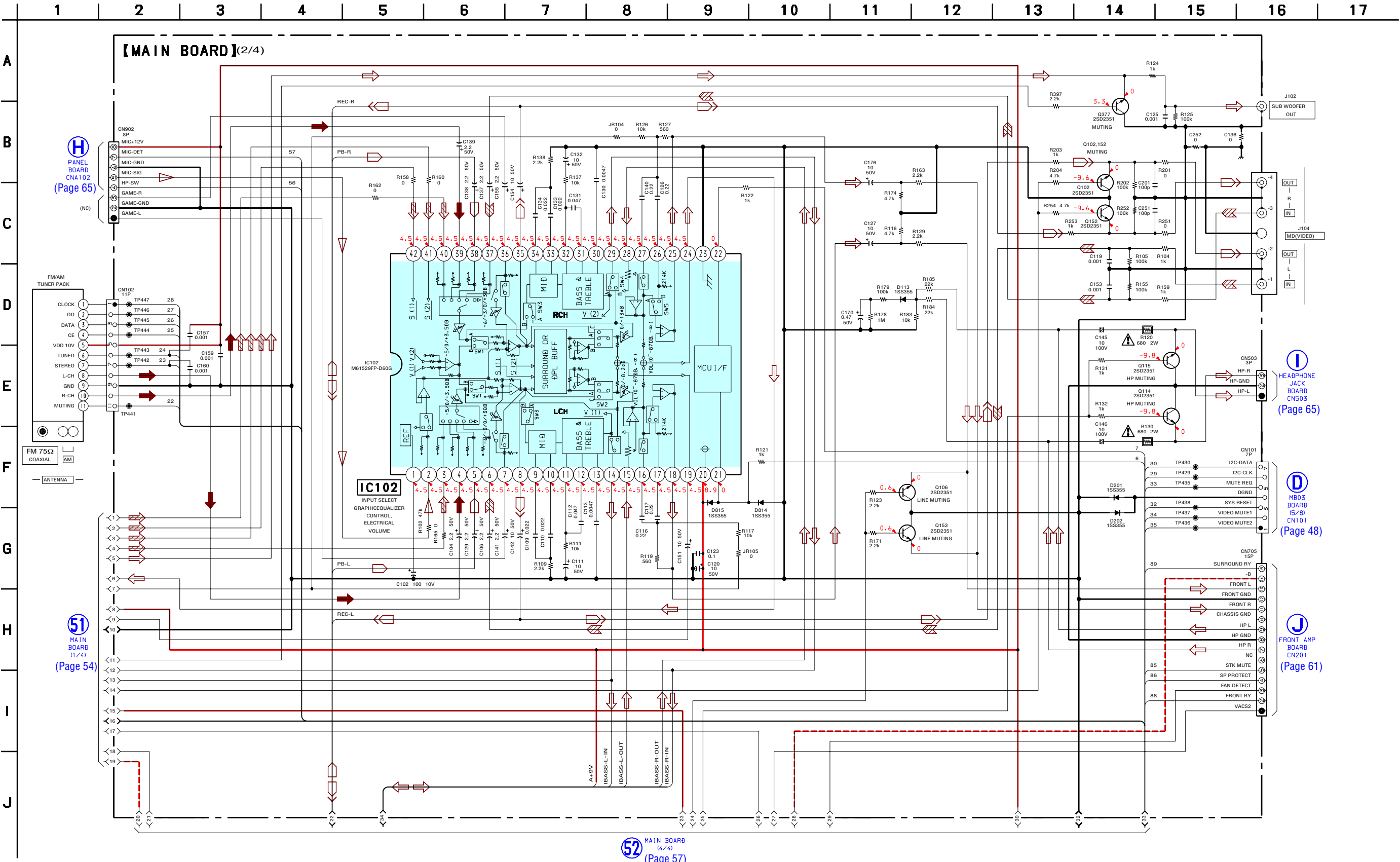
• Semiconductor Location

| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D102     | C-9      | Q106     | I-8      |
| D111     | D-9      | Q114     | G-12     |
| D112     | C-9      | Q115     | G-12     |
| D113     | F-11     | Q152     | F-12     |
| D201     | B-5      | Q153     | I-9      |
| D202     | B-5      | Q373     | B-7      |
| D609     | H-3      | Q374     | C-7      |
| D610     | H-3      | Q375     | C-7      |
| D611     | G-3      | Q376     | B-7      |
| D703     | I-11     | Q377     | E-7      |
| D704     | C-5      | Q601     | H-5      |
| D705     | C-5      | Q602     | I-6      |
| D706     | C-5      | Q603     | H-6      |
| D707     | C-5      | Q604     | H-4      |
| D708     | E-5      | Q605     | H-4      |
| D709     | F-6      | Q606     | H-5      |
| D710     | E-5      | Q607     | H-5      |
| D711     | E-5      | Q608     | H-6      |
| D712     | I-4      | Q609     | H-6      |
| D714     | F-5      | Q610     | H-2      |
| D716     | I-12     | Q611     | H-3      |
| D717     | J-12     | Q612     | H-6      |
| D729     | I-6      | Q613     | H-3      |
| D732     | G-10     | Q614     | H-3      |
| D733     | G-10     | Q615     | G-3      |
| D734     | G-9      | Q616     | G-3      |
| D735     | G-9      | Q617     | H-2      |
| D804     | E-6      | Q618     | H-3      |
| D809     | D-6      | Q701     | E-7      |
| D810     | B-2      | Q702     | E-6      |
| D811     | D-6      | Q703     | D-6      |
| D812     | B-3      | Q704     | E-7      |
| D813     | E-6      | Q705     | E-7      |
| D814     | C-11     | Q706     | C-5      |
| D815     | C-12     | Q707     | I-4      |
|          |          | Q708     | I-12     |
| IC101    | C-9      | Q709     | I-11     |
| IC102    | C-11     | Q710     | I-12     |
| IC301    | C-8      | Q713     | H-12     |
| IC303    | I-3      | Q714     | I-12     |
| IC601    | G-5      | Q719     | C-3      |
| IC703    | C-4      | Q721     | E-6      |
| IC1104   | D-3      | Q723     | E-7      |
|          |          | Q724     | B-3      |

**6-23. SCHEMATIC DIAGRAM – MAIN Section (1/4) –**



6-24. SCHEMATIC DIAGRAM – MAIN Section (2/4) –



52 MAIN BOARD (4/4) (Page 57)

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

56 56

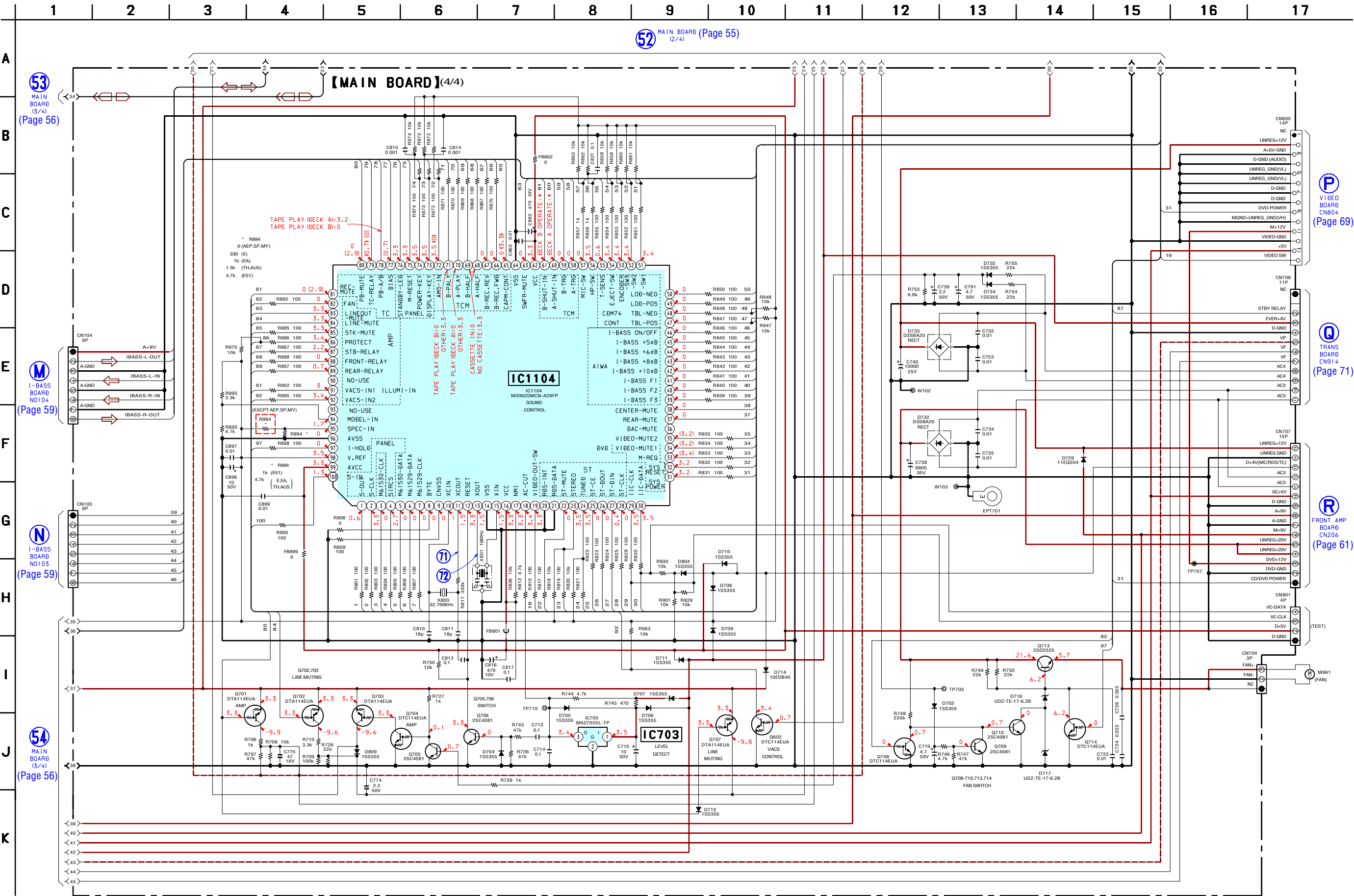


**L**  
SURROUND AMP  
BOARD  
CN303  
(Page 63)

**F**  
DRIVER  
BOARD  
CN701  
(Page 41)

54  
MAIN  
BOARD  
(4/4)  
(Page 57)

6-26. SCHEMATIC DIAGRAM – MAIN Section (4/4) – • See page 52 for Waveforms.



52 MAIN BOARD (Page 55)

53 MAIN BOARD (3/4) (Page 56)

M I-BASS BOARD N0104 (Page 59)

N I-BASS BOARD N0103 (Page 59)

54 MAIN BOARD (3/4) (Page 56)

P VIDEO BOARD CN804 (Page 69)

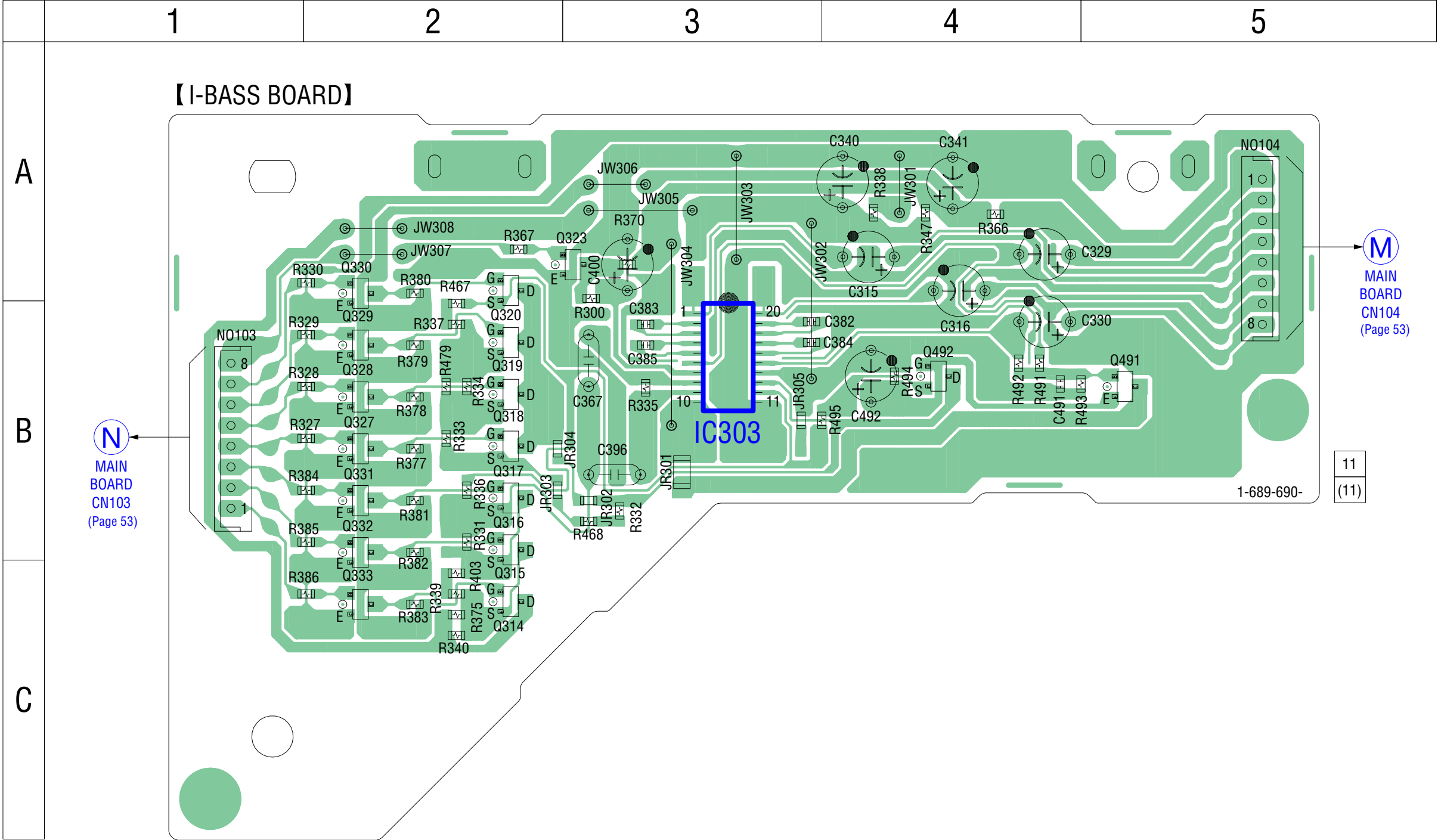
Q TRANS BOARD CN914 (Page 71)

R FRONT AMP BOARD CN206 (Page 61)

6-27. PRINTED WIRING BOARD – I-BASS Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

• Semiconductor Location

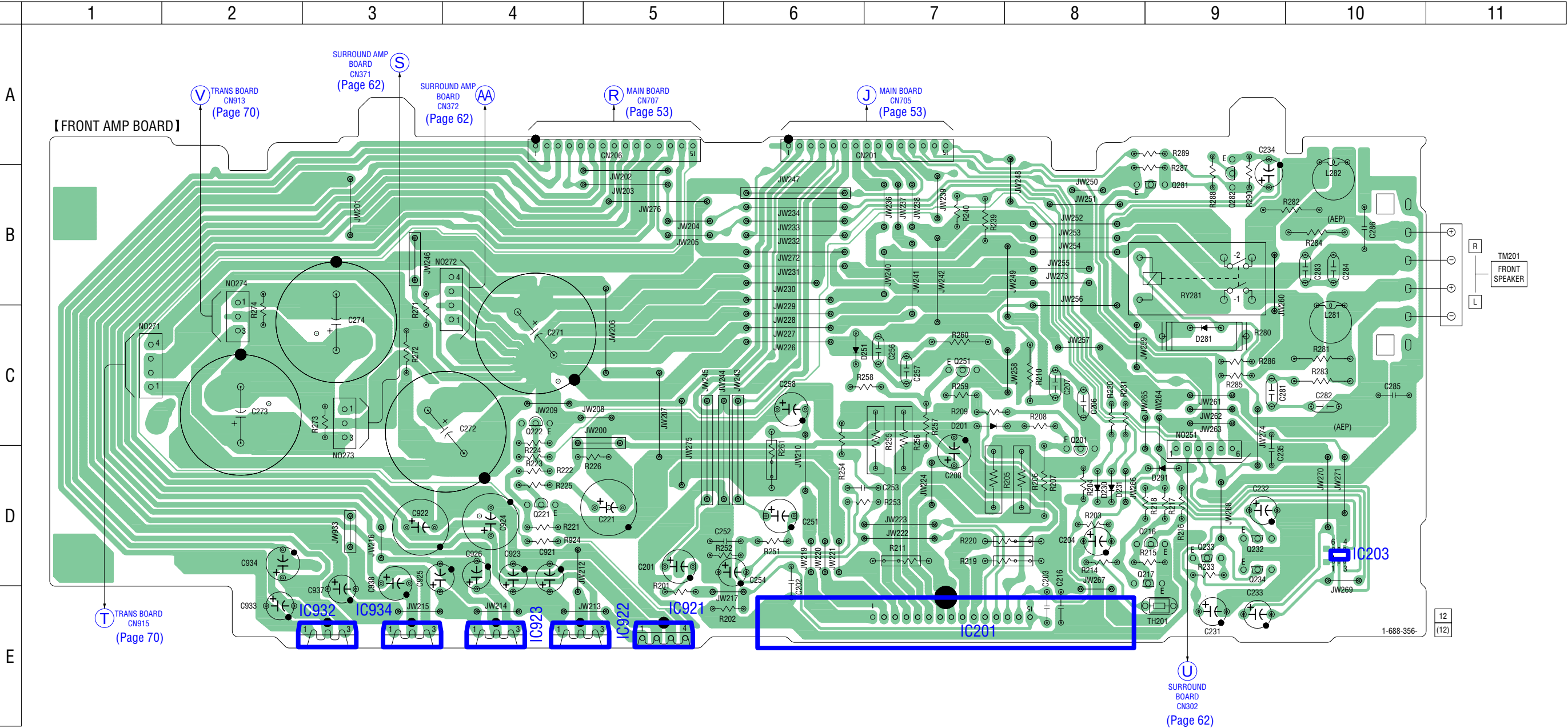
| Ref. No. | Location |
|----------|----------|
| IC303    | B-3      |
| Q314     | C-2      |
| Q315     | B-2      |
| Q316     | B-2      |
| Q317     | B-2      |
| Q318     | B-2      |
| Q319     | B-2      |
| Q320     | A-2      |
| Q323     | A-3      |
| Q327     | B-2      |
| Q328     | B-2      |
| Q329     | B-2      |
| Q330     | A-2      |
| Q331     | B-2      |
| Q332     | B-2      |
| Q333     | C-2      |
| Q491     | B-5      |
| Q492     | B-4      |



## G



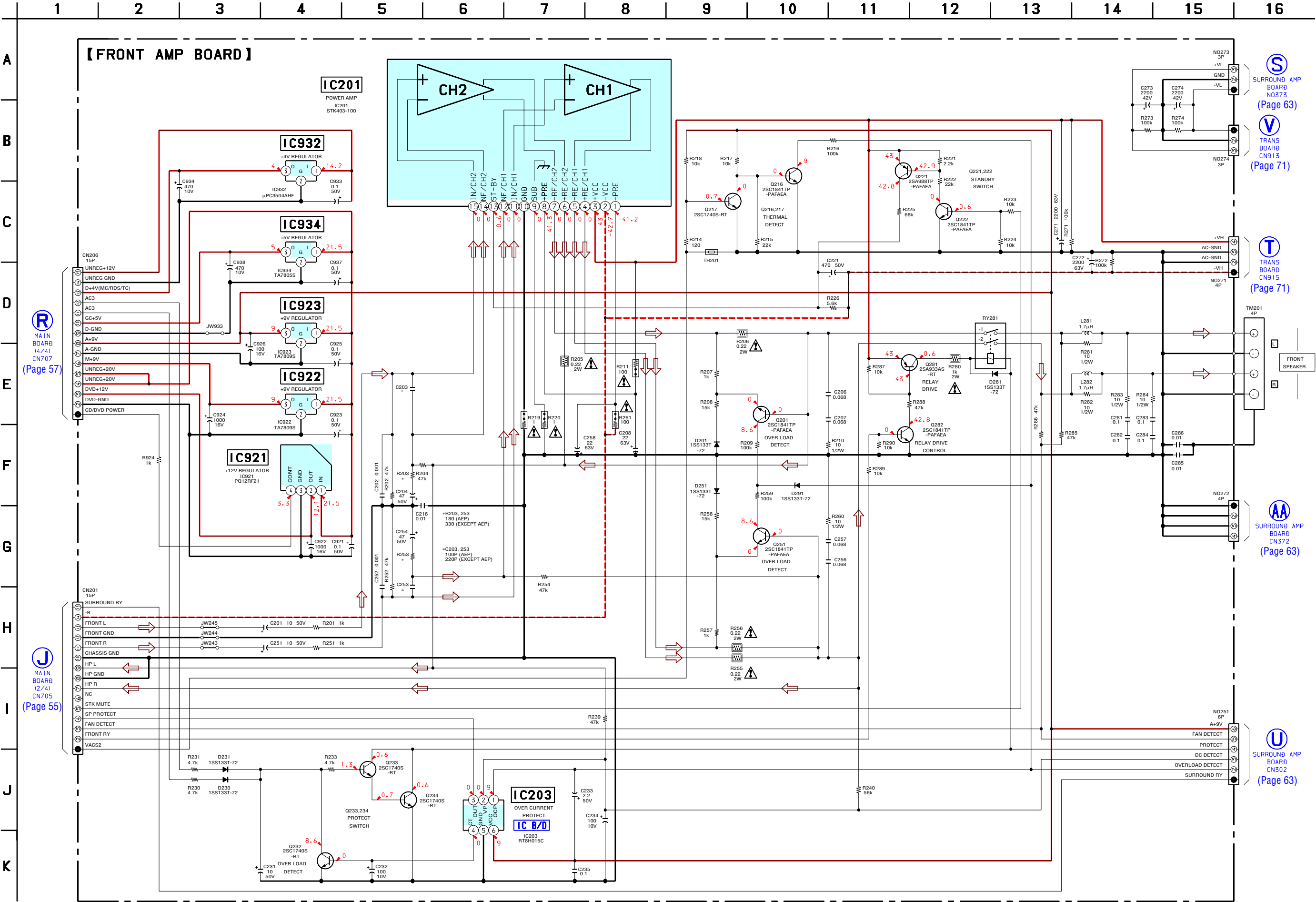
6-29. PRINTED WIRING BOARD – FRONT AMP Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

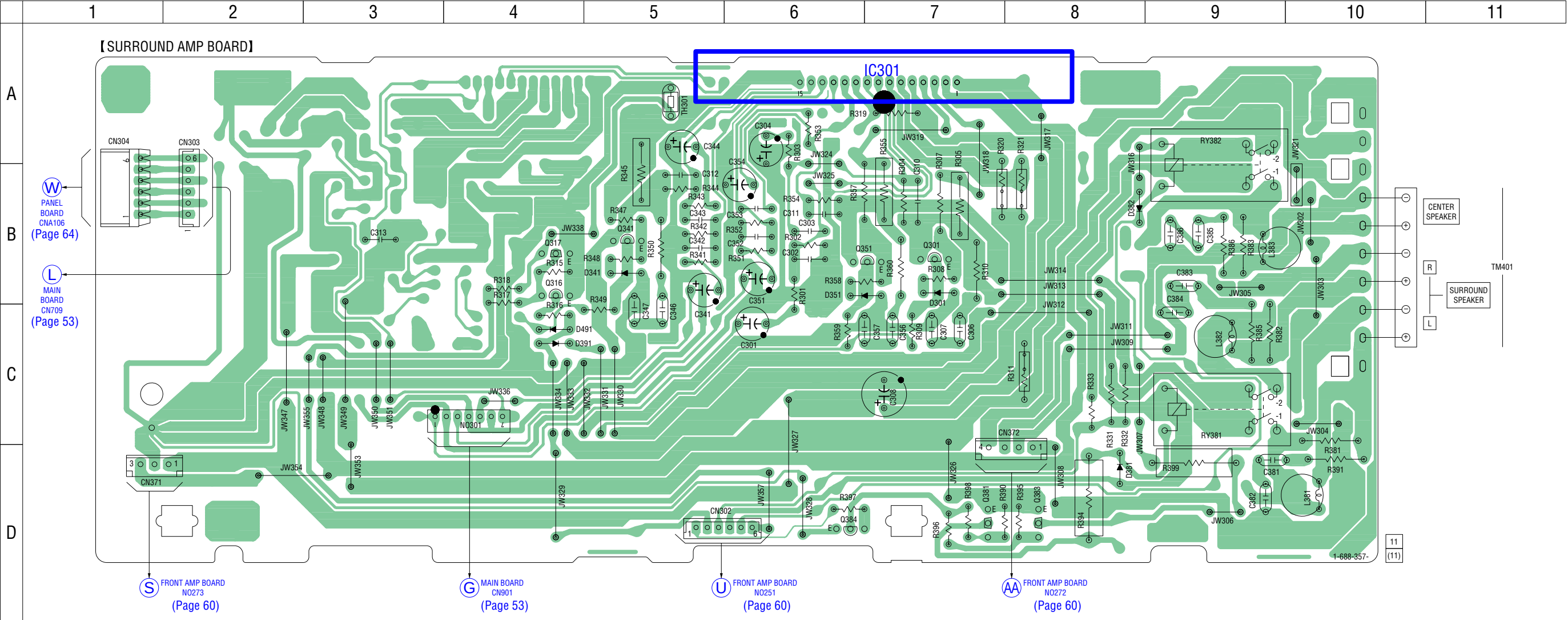
| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D201     | C-7      | IC934    | E-3      |
| D230     | D-8      |          |          |
| D231     | D-8      | Q201     | D-8      |
| D251     | C-6      | Q216     | D-9      |
| D281     | C-9      | Q217     | D-9      |
| D291     | D-9      | Q221     | D-4      |
|          |          | Q222     | C-4      |
| IC201    | E-7      | Q232     | D-9      |
| IC203    | D-10     | Q233     | D-9      |
| IC921    | E-5      | Q234     | D-9      |
| IC922    | E-4      | Q251     | C-7      |
| IC923    | E-4      | Q281     | B-9      |
| IC932    | E-3      | Q282     | B-9      |

6-30. SCHEMATIC DIAGRAM – FRONT AMP Section – • See page 74 for IC Block Diagram.



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

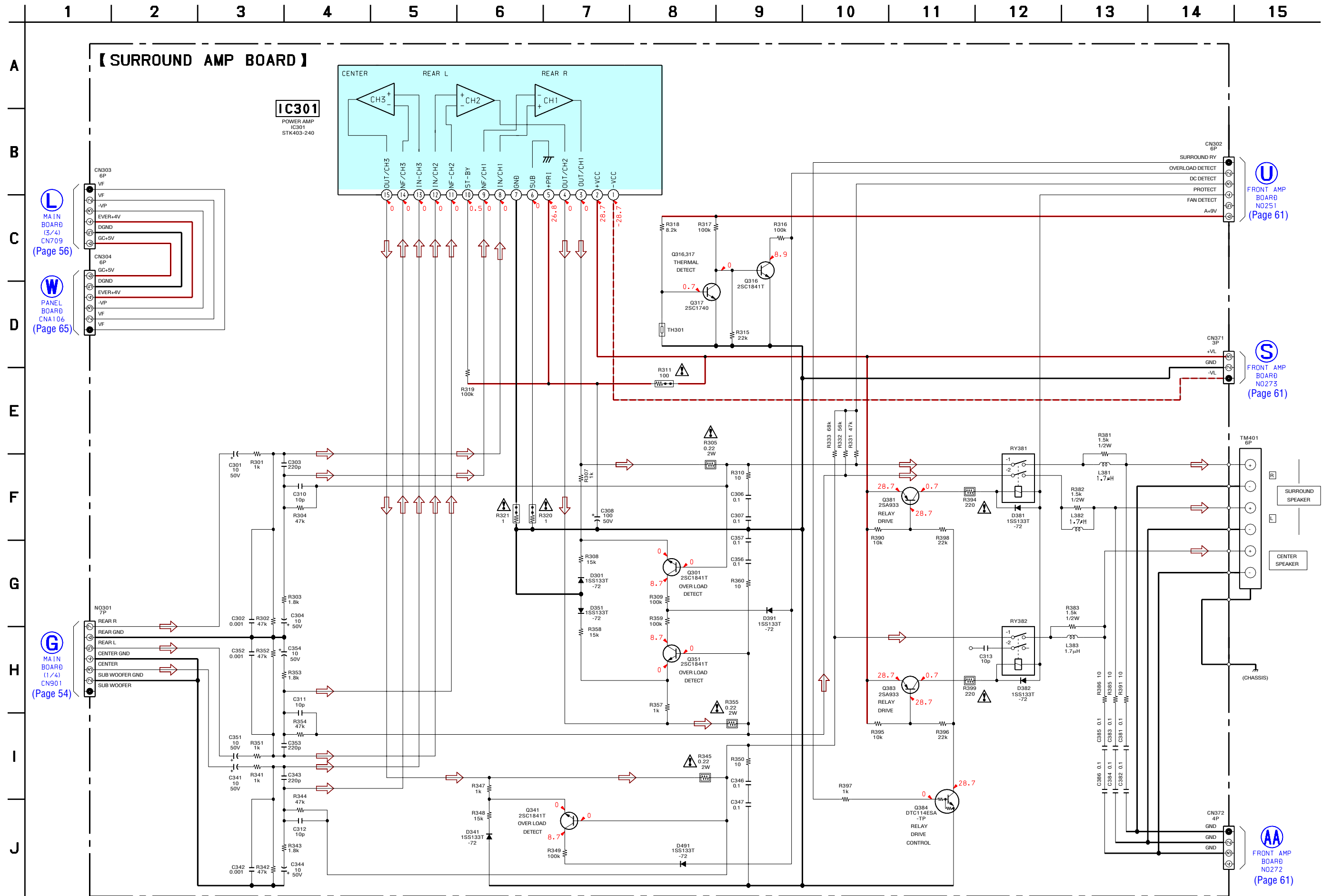
6-31. PRINTED WIRING BOARD – SURROUND AMP Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

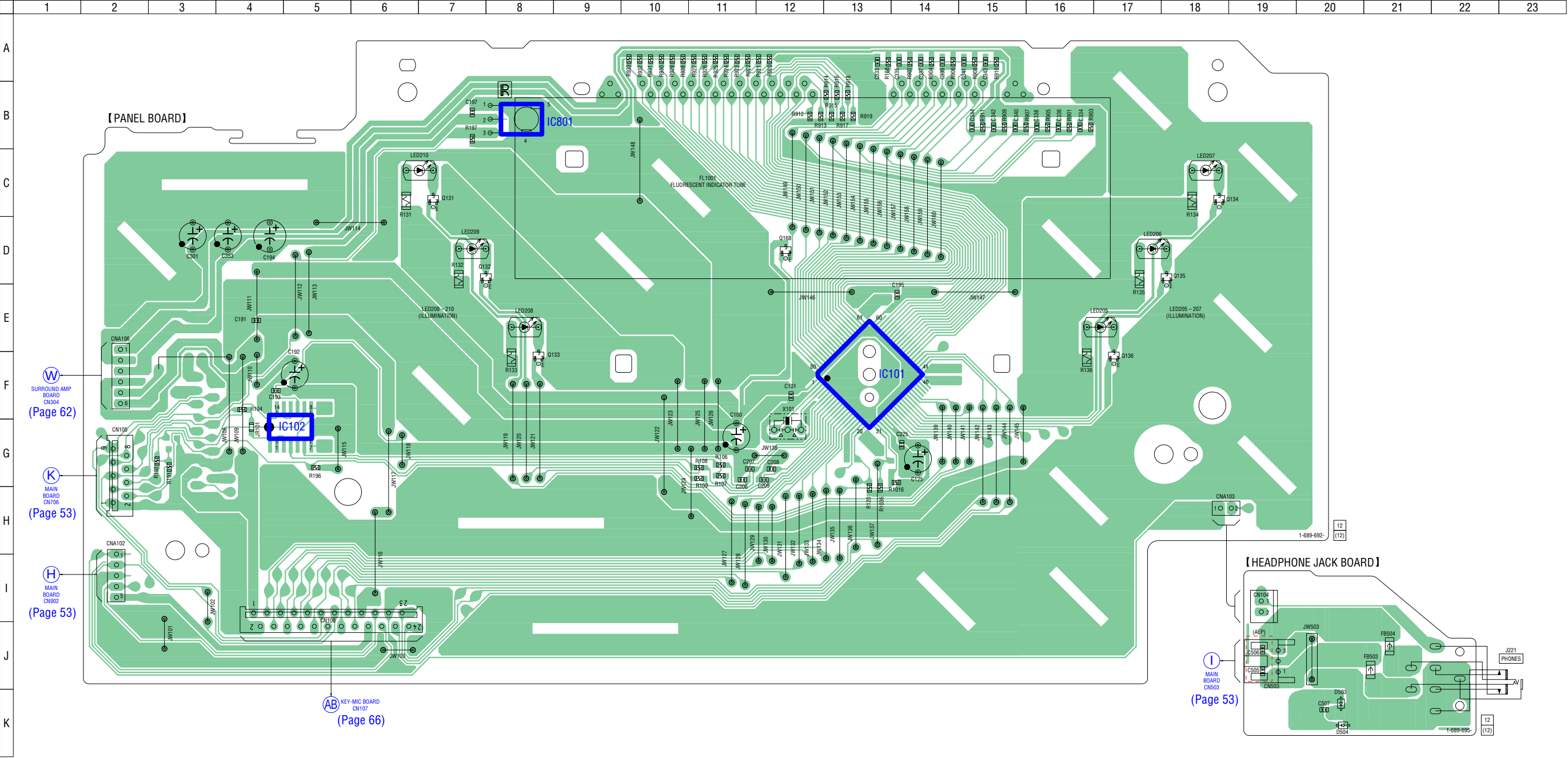
| Ref. No. | Location |
|----------|----------|
| D301     | B-7      |
| D341     | B-5      |
| D351     | B-7      |
| D381     | B-8      |
| D382     | B-8      |
| D391     | C-4      |
| D491     | C-4      |
| IC301    | A-7      |
| Q301     | B-7      |
| Q316     | B-4      |
| Q317     | B-4      |
| Q341     | B-5      |
| Q351     | B-7      |
| Q381     | D-7      |
| Q383     | D-8      |
| Q384     | D-6      |

**6-32. SCHEMATIC DIAGRAM – SURROUND AMP Section –**



The components identified by mark  or dotted line with mark  are critical for safety.  
Replace only with part number specified.

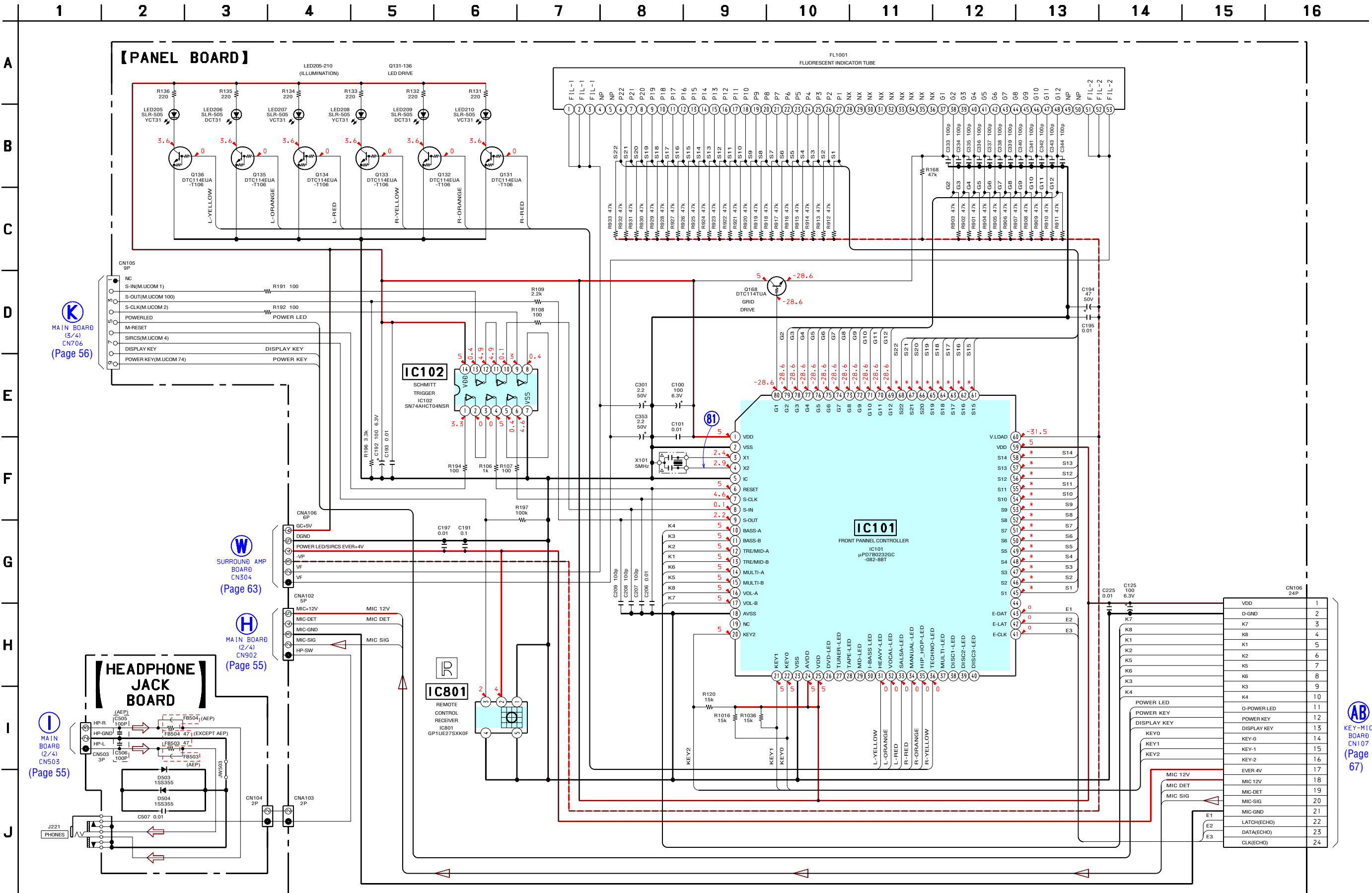
6-33. PRINTED WIRING BOARDS – PANEL Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.



• Semiconductor Location

| Ref. No. | Location | Ref. No. | Location |
|----------|----------|----------|----------|
| D503     | K-20     | LED209   | D-7      |
| D504     | K-20     | LED210   | C-7      |
| IC101    | F-13     | Q131     | C-7      |
| IC102    | G-5      | Q132     | D-7      |
| IC801    | B-8      | Q133     | F-8      |
|          |          | Q134     | C-18     |
| LED205   | E-17     | Q135     | D-18     |
| LED206   | D-17     | Q136     | F-17     |
| LED207   | C-18     | Q168     | D-12     |
| LED208   | E-8      |          |          |

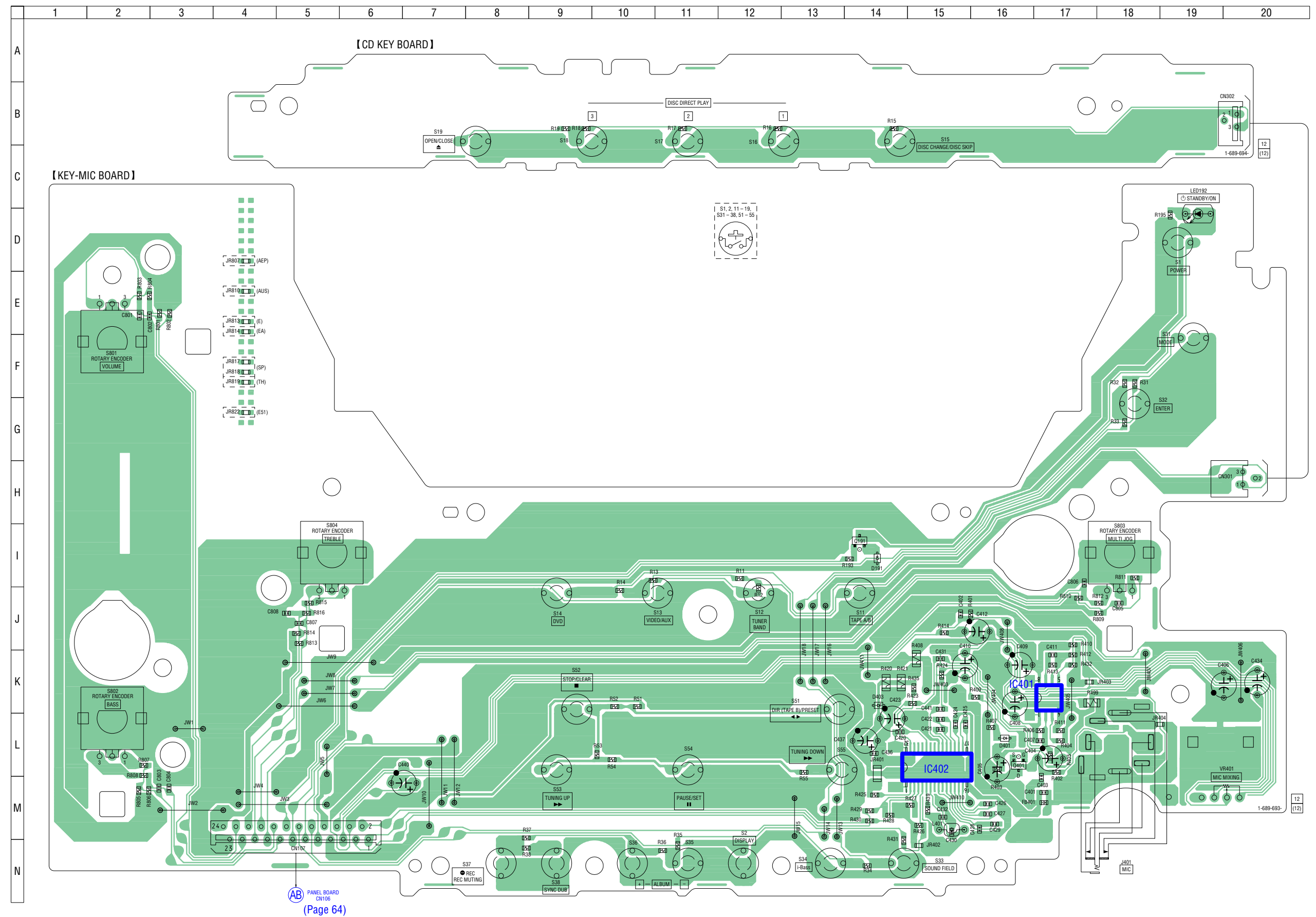
6-34. SCHEMATIC DIAGRAM – PANEL Section – • See page 52 for Waveform.



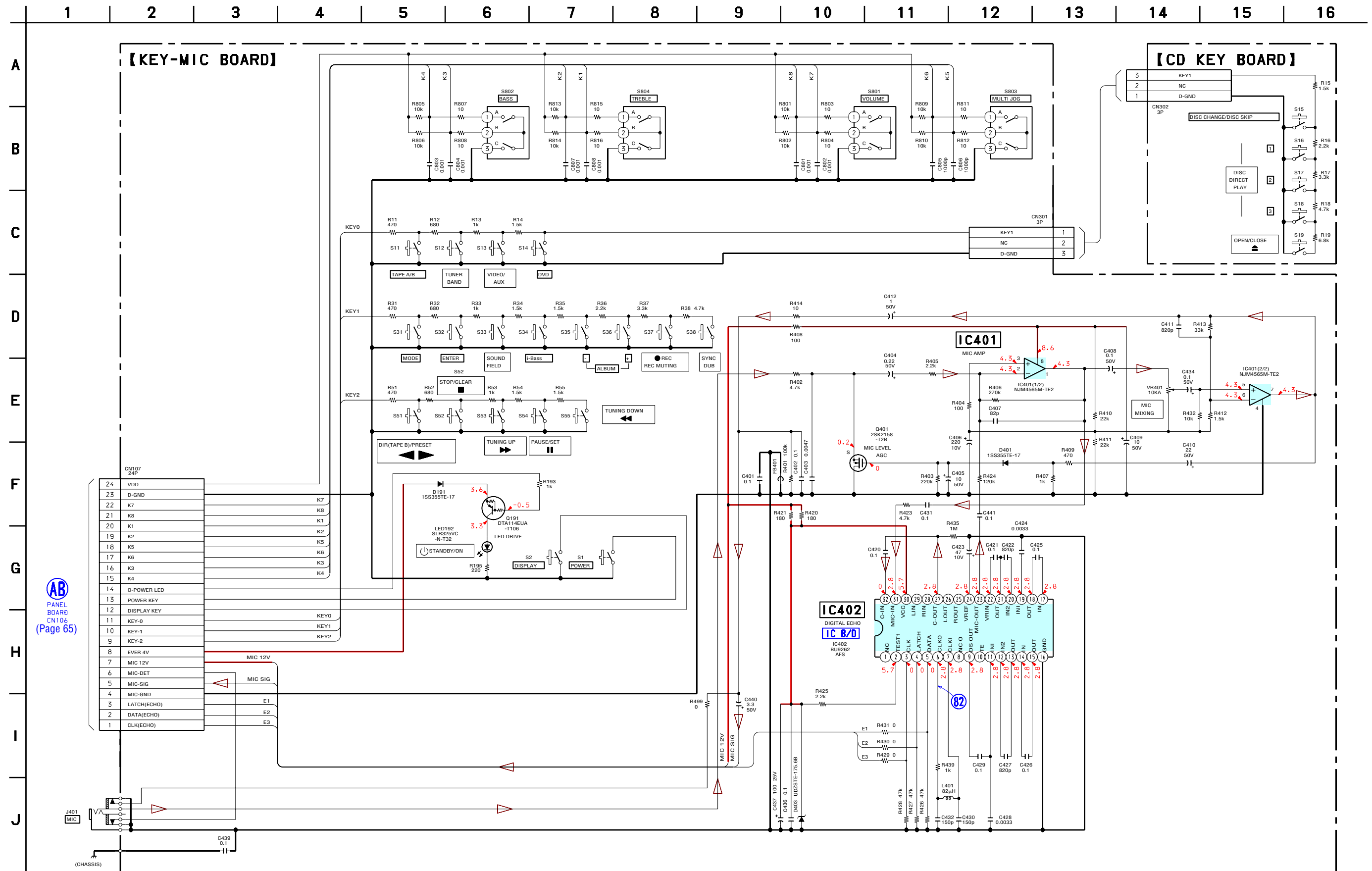
**6-35. PRINTED WIRING BOARDS – KEY Section –** • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

- **Semiconductor Location**

| Ref. No. | Location |
|----------|----------|
| D191     | I-14     |
| D401     | L-16     |
| D403     | K-14     |
| IC401    | K-17     |
| IC402    | L-15     |
| LED192   | D-19     |
| Q191     | I-14     |
| Q401     | L-16     |



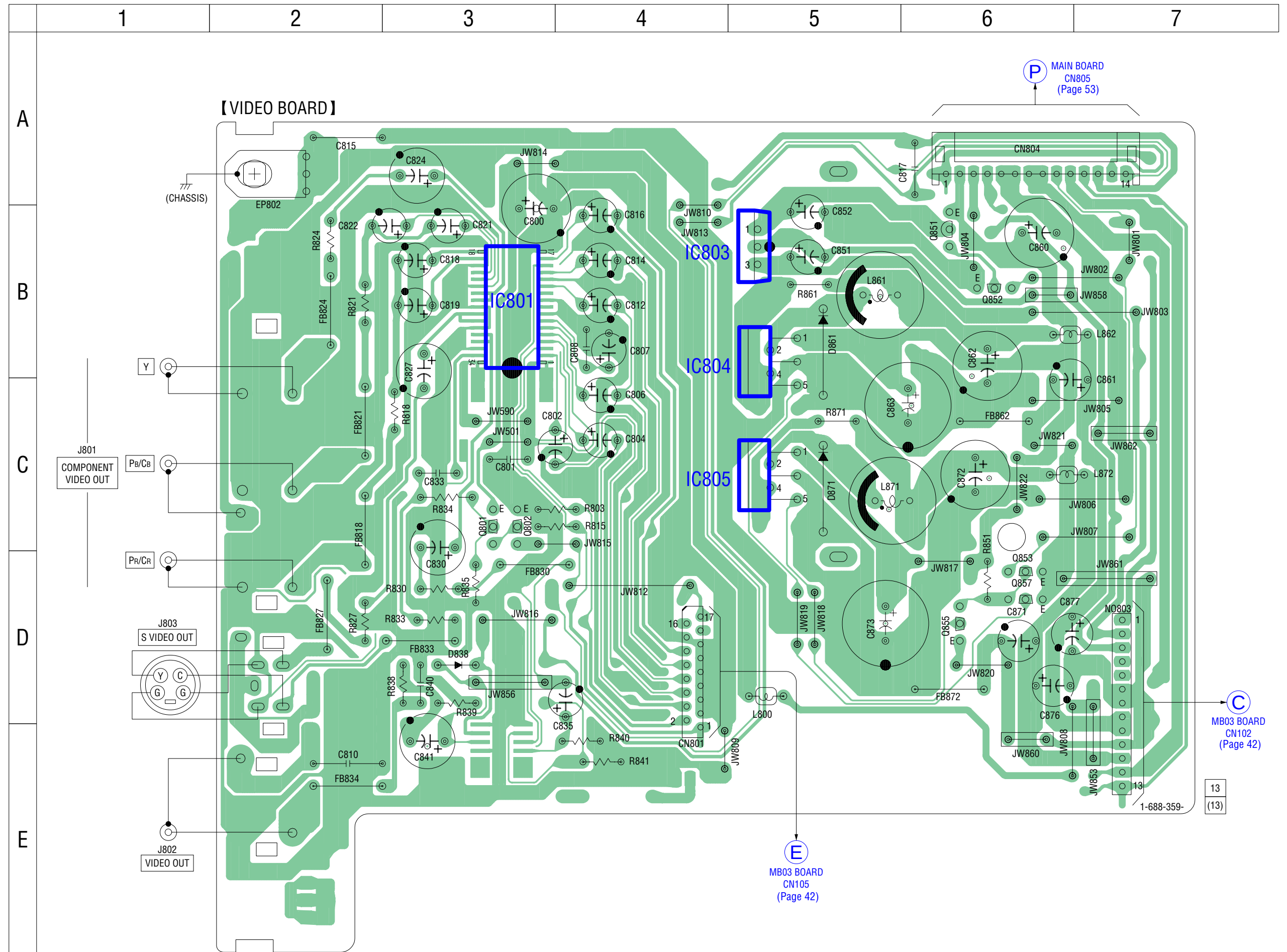
**6-36. SCHEMATIC DIAGRAM – KEY Section –** • See page 52 for Waveform. • See page 74 for IC Block Diagram.



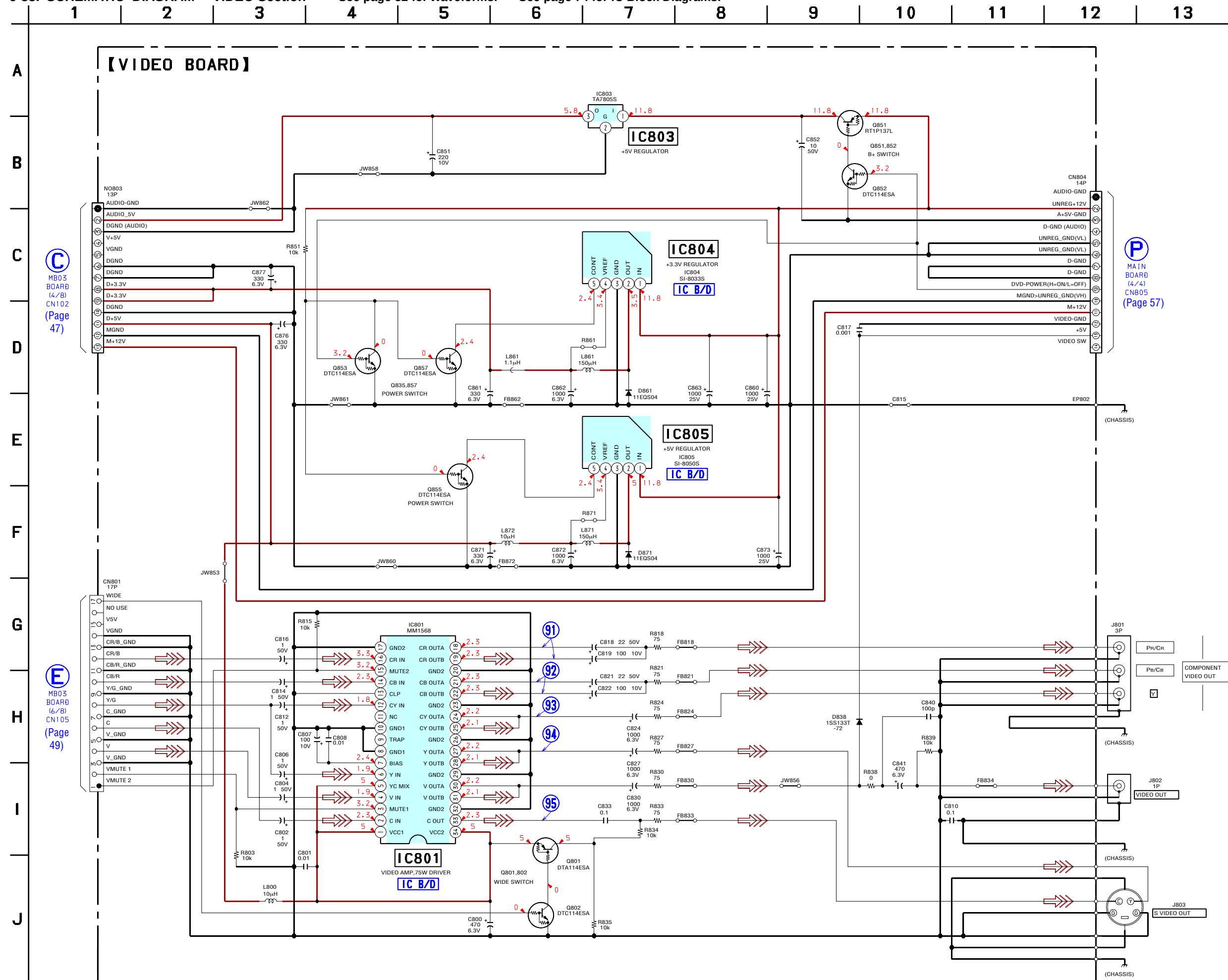
**6-37. PRINTED WIRING BOARD – VIDEO Section – • See page 37 for Circuit Boards Location.**  :Uses unleaded solder.

- **Semiconductor Location**

| Ref. No. | Location |
|----------|----------|
| D838     | D-3      |
| D861     | B-5      |
| D871     | C-5      |
| IC801    | B-3      |
| IC803    | B-5      |
| IC804    | B-5      |
| IC805    | C-5      |
| Q801     | C-3      |
| Q802     | C-3      |
| Q851     | B-6      |
| Q852     | B-6      |
| Q853     | D-6      |
| Q855     | D-5      |
| Q857     | D-6      |

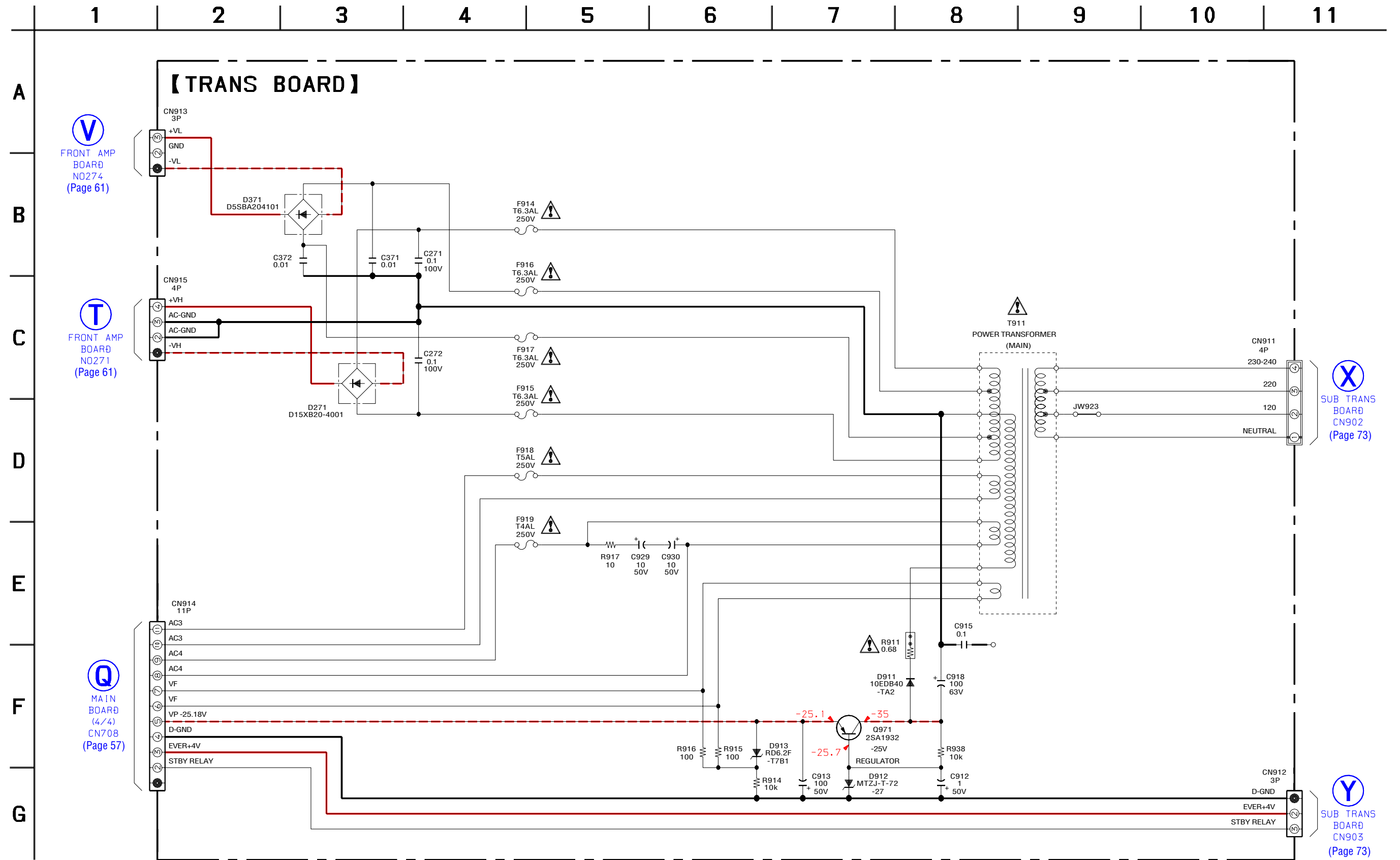


**6-38. SCHEMATIC DIAGRAM – VIDEO Section –** • See page 52 for Waveforms. • See page 74 for IC Block Diagrams.

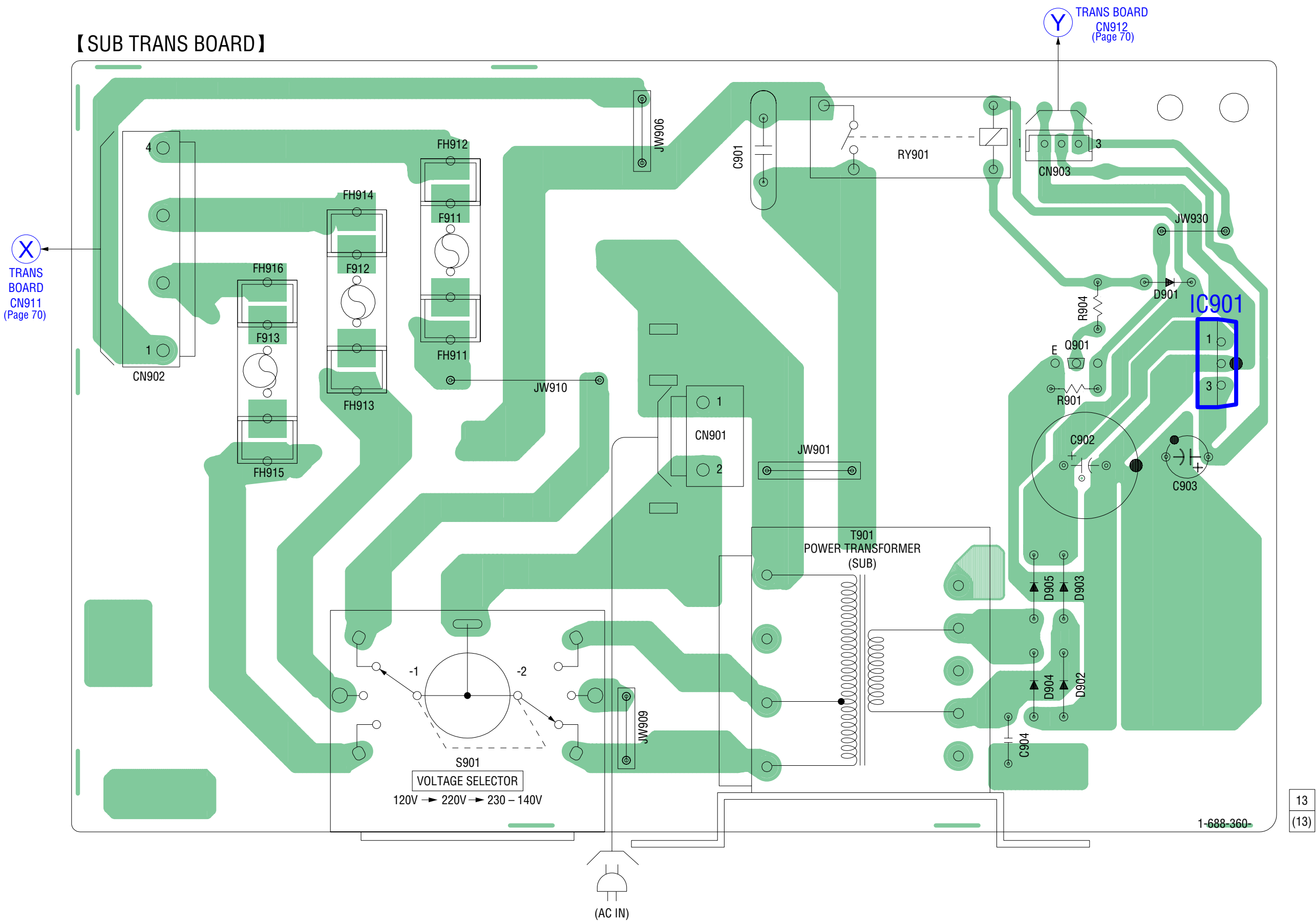




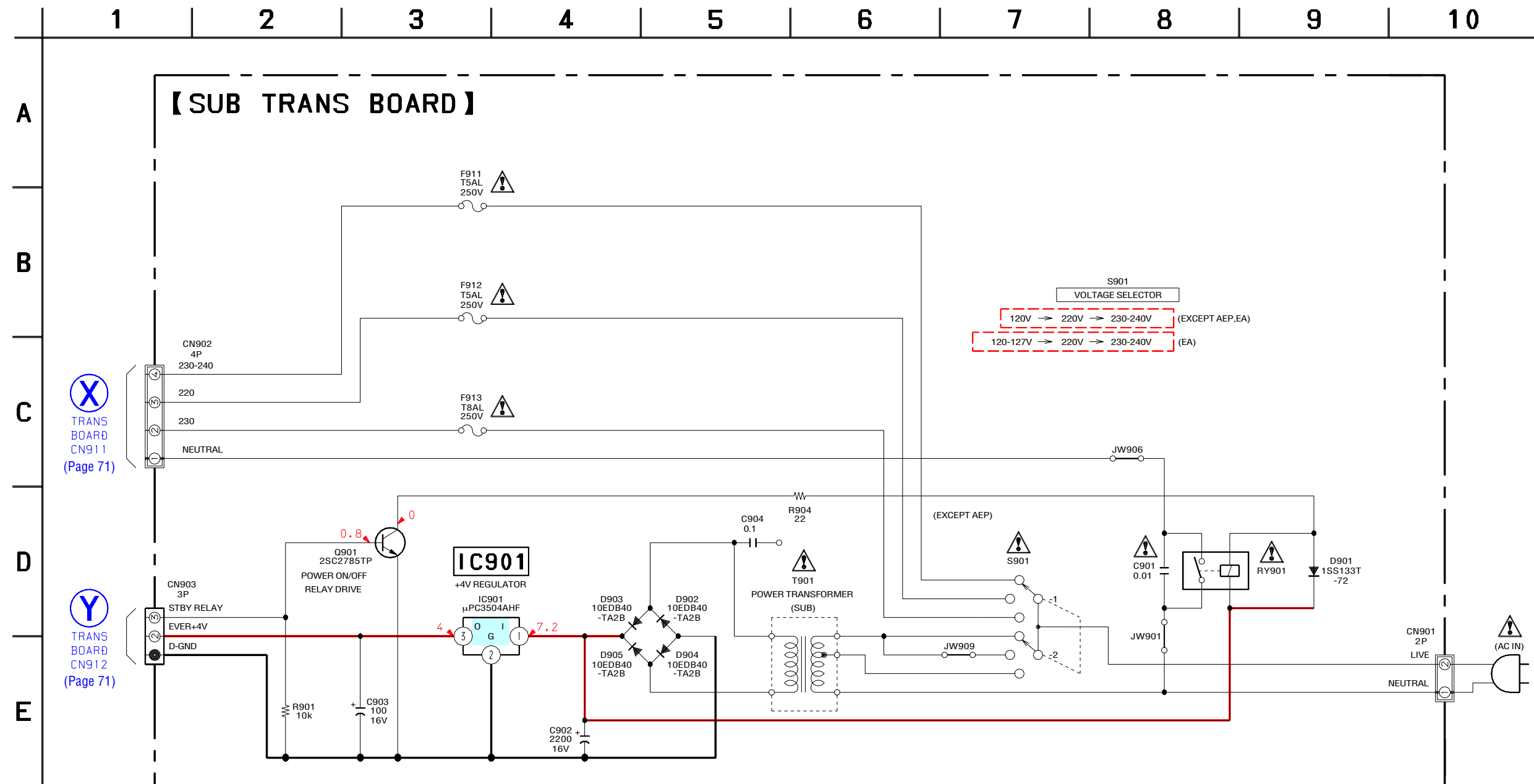
## 6-40. SCHEMATIC DIAGRAM - TRANS Section -



6-41. PRINTED WIRING BOARD – SUB TRANS Section – • See page 37 for Circuit Boards Location.  :Uses unleaded solder.

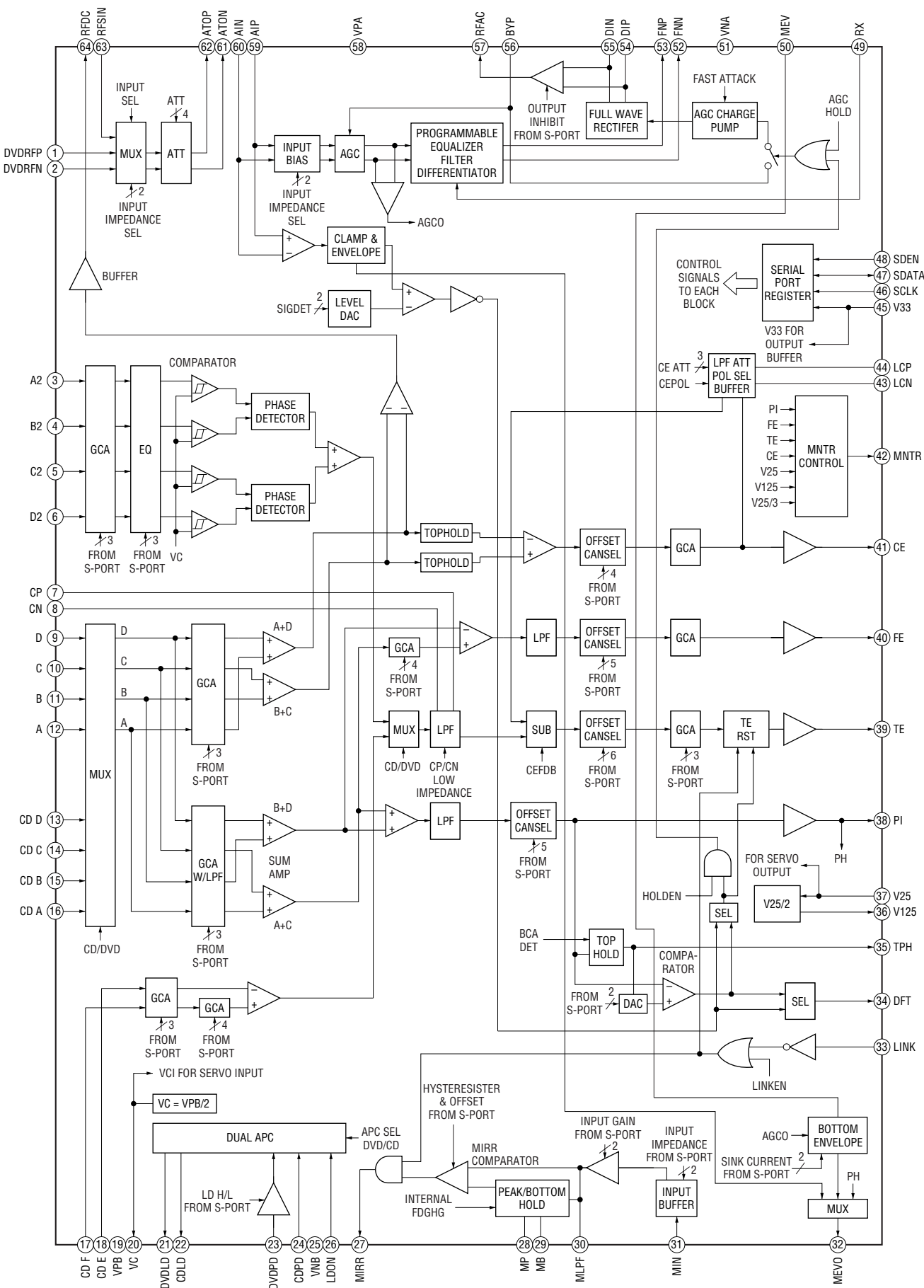


6-42. SCHEMATIC DIAGRAM – SUB TRANS Section –



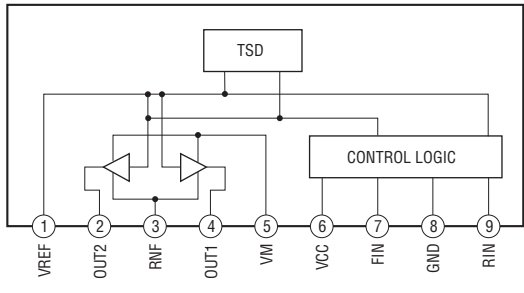
• IC Block Diagrams  
– RF Board –

IC001 SP3723BDAOPM



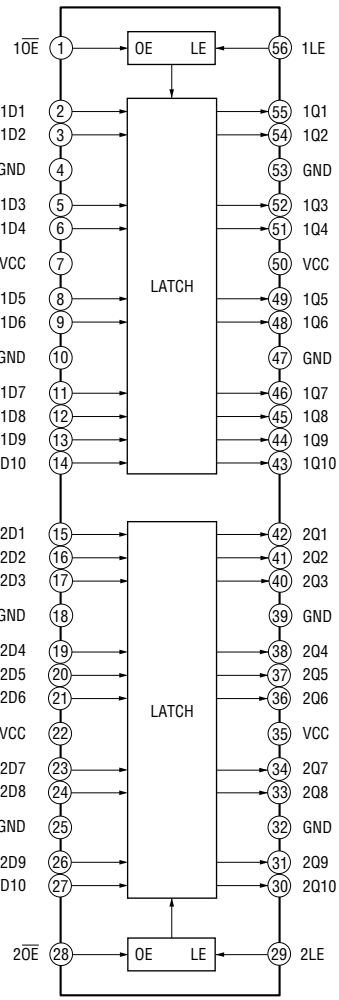
– DRIVER Board –

IC701, 712 BA6956AN

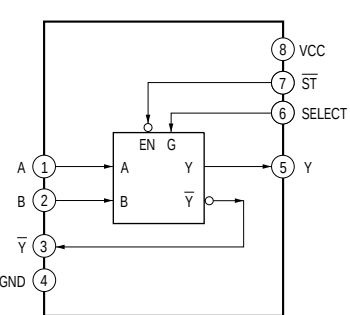


– BD Board –

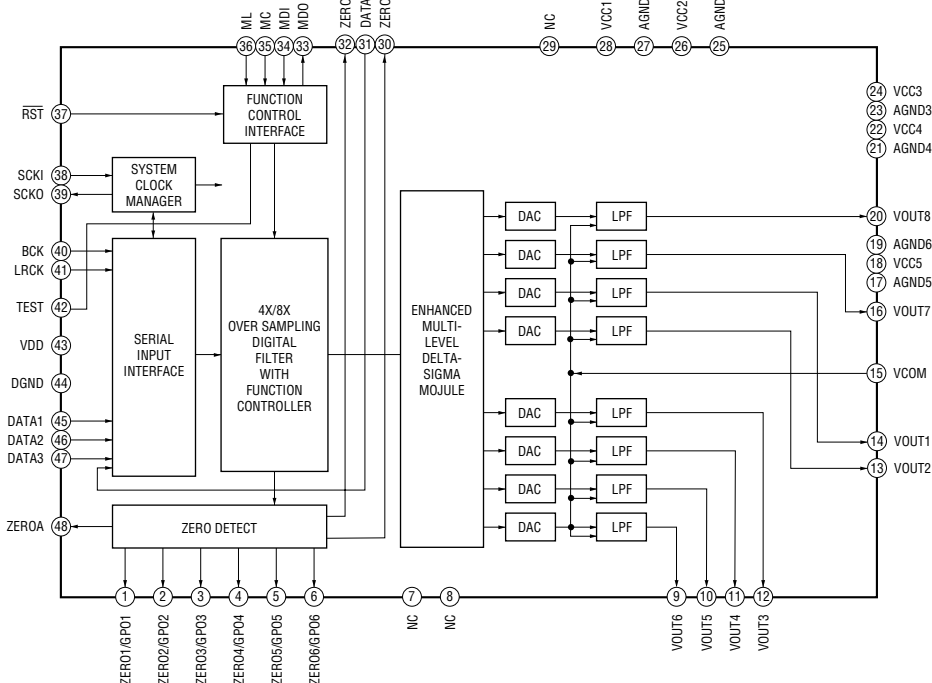
IC216 SN74ALVCH1684DGGR



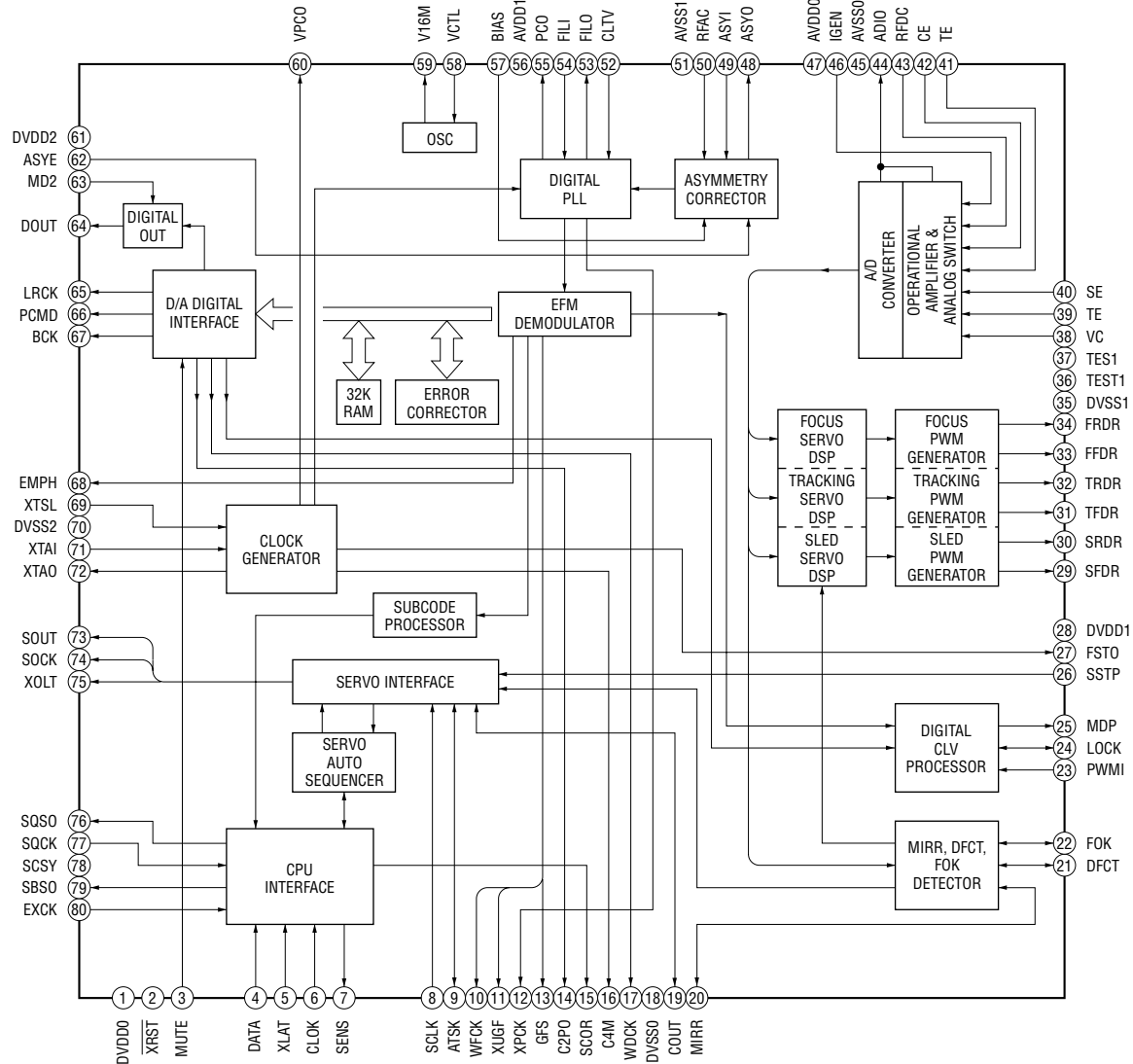
IC252 TC7WH157FK (TE85R)



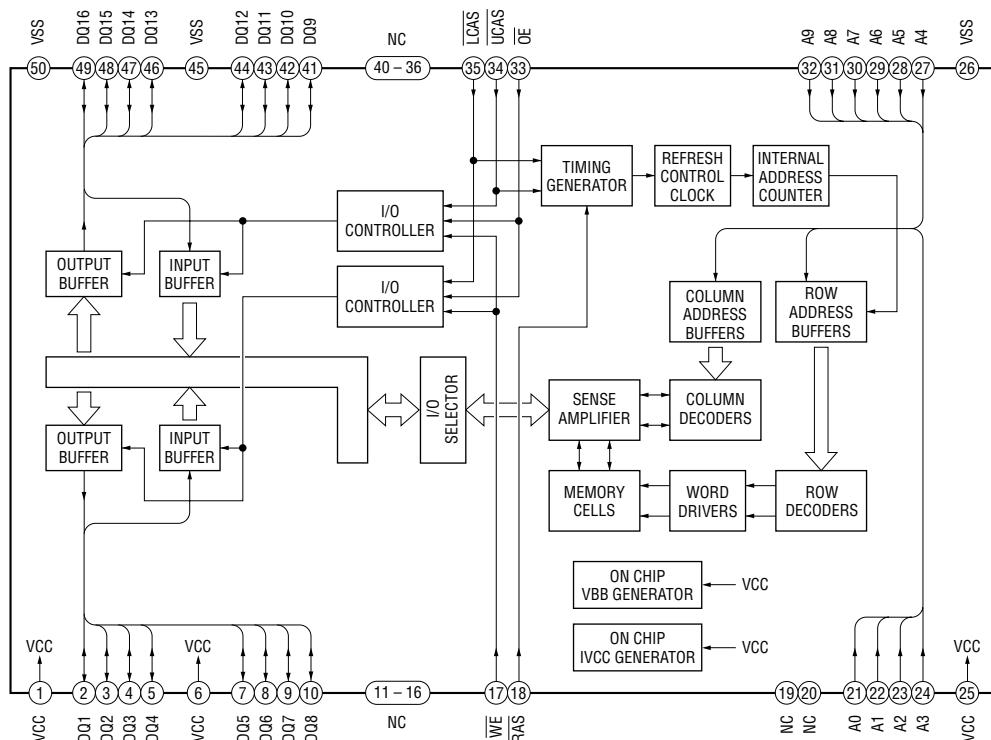
IC302 PCM1609KPTR



## IC509 CXD3068Q

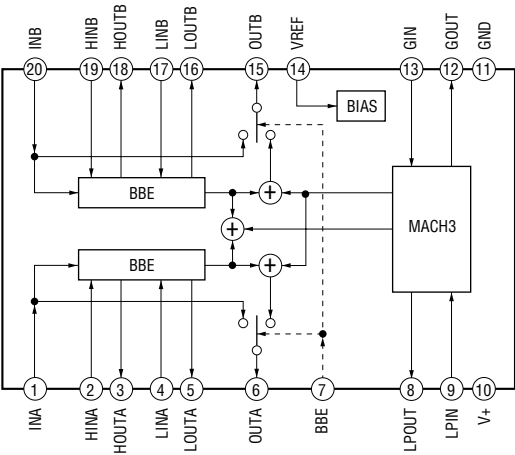


## IC706 MSM51V18165F-60TSKR1



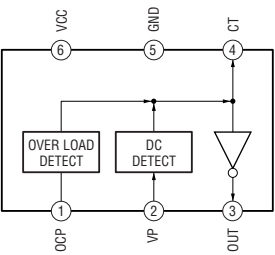
- I-BASS Board -

IC303 NJM2156M (TE2)



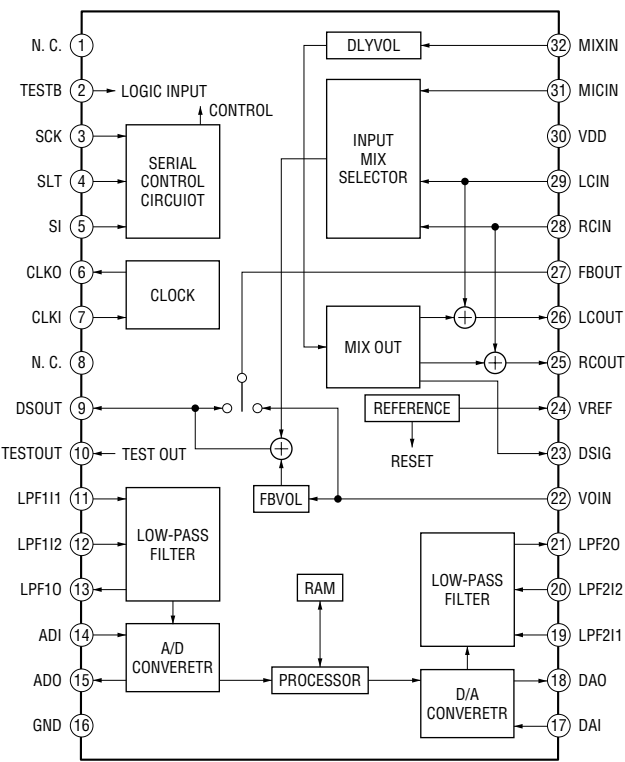
- FRONT AMP Board -

IC203 RT8H015C-T112-1



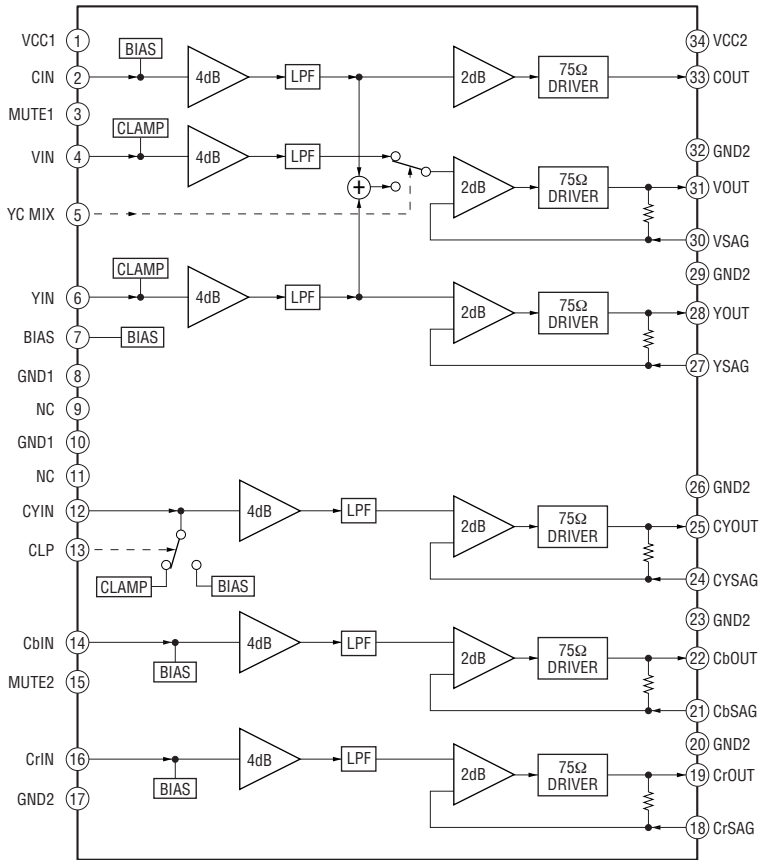
- KEY-MIC Board -

IC402 BU9262AFS

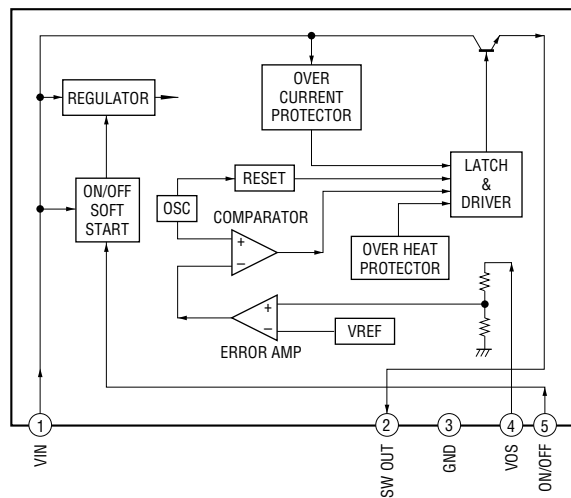


– VIDEO Board –

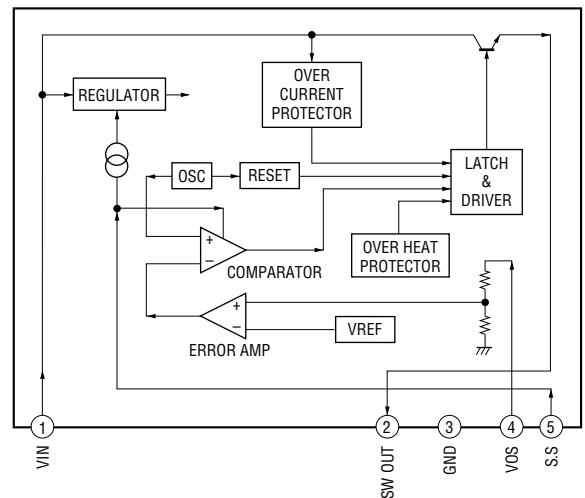
IC801 MM1568



IC804 SI-8033S



IC805 SI-8050S-LF1101



## 6-43. IC PIN FUNCTION DESCRIPTION

## • MB03 BOARD IC207 ZIVA5X-CIF (DVD SYSTEM PROCESSOR)

| Pin No.  | Pin Name     | I/O | Description                                                       |
|----------|--------------|-----|-------------------------------------------------------------------|
| 1        | VDDP         | —   | Power supply terminal (+3.3V) (I/O signal)                        |
| 2        | HA1          | I/O | Address bus                                                       |
| 3 to 11  | HD15 to HD7  | I/O | Data bus (address signal multiplexed)                             |
| 12       | VDDP         | —   | Power supply terminal (+3.3V) (I/O signal)                        |
| 13       | GNDP         | —   | Ground terminal (I/O signal)                                      |
| 14 to 19 | HD6 to HD1   | I/O | Data bus (address signal multiplexed)                             |
| 20       | VDDP         | —   | Power supply terminal (+3.3V) (I/O signal)                        |
| 21       | GNDP         | —   | Ground terminal (I/O signal)                                      |
| 22       | HD0          | I/O | Data bus (address signal multiplexed)                             |
| 23       | HDTACK       | I/O | Acknowledge signal input/output for host data transfer (not used) |
| 24       | HIRQ0        | I   | Interrupt signal input for Medusa (not used)                      |
| 25       | WEH.UDS      | I/O | Host upper data strobe signal output (not used)                   |
| 26       | WEL.LDS      | I/O | Host lower data strobe signal output (not used)                   |
| 27       | HREAD        | I/O | Read/write strobe signal output                                   |
| 28       | GPIO0        | I/O | Jig detection port (pull-up)                                      |
| 29       | GND          | —   | Ground terminal (inside core)                                     |
| 30       | VDD          | —   | Power supply terminal (+1.8V) (inside core)                       |
| 31       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |
| 32       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)                  |
| 33 to 42 | MA9 to MA0   | O   | SDRAM address bus                                                 |
| 43       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |
| 44       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)                  |
| 45, 46   | MA10,MA11    | O   | SDRAM address bus                                                 |
| 47       | BA1          | O   | SDRAM bank select 1 signal output                                 |
| 48       | BA0          | O   | SDRAM bank select 0 signal output                                 |
| 49       | MCS0         | O   | SDRAM chip select 0 signal output                                 |
| 50       | MCS1         | O   | Not used                                                          |
| 51       | MRAS         | O   | SDRAM row address strobe signal output                            |
| 52       | MCAS         | O   | SDRAM column address strobe signal output                         |
| 53       | MWE          | O   | SDRAM write enable signal output (“H” : read, “L” : write)        |
| 54       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |
| 55       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)                  |
| 56       | MCLK         | O   | SDRAM Clock output                                                |
| 57 to 60 | MD0 to MD3   | I/O | SDRAM data                                                        |
| 61       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |
| 62       | MDQM0        | O   | Byte read /write mask signal 0 output                             |
| 63       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)                  |
| 64 to 71 | MD6 to MD11  | I/O | SDRAM data                                                        |
| 72       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |
| 73       | MDQM1        | O   | Byte read /write mask signal 1 output                             |
| 74       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)                  |
| 75 to 78 | MD12 to MD15 | I/O | SDRAM data                                                        |
| 79       | GND          | —   | Ground terminal (inside core)                                     |
| 80       | VDD          | —   | Power supply terminal (+1.8V) (inside core)                       |
| 81 to 84 | MD16 to MD19 | I/O | SDRAM data                                                        |
| 85       | GND25        | —   | Ground terminal (SDRAM I/O signal)                                |

| Pin No.   | Pin Name     | I/O | Description                                              |
|-----------|--------------|-----|----------------------------------------------------------|
| 86        | MDQM2        | O   | Byte read /write mask signal 2 output                    |
| 87        | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)         |
| 88 to 95  | MD20 to MD27 | I/O | SDRAM data                                               |
| 96        | GND25        | —   | Ground terminal (SDRAM I/O signal)                       |
| 97        | MDQM3        | O   | Byte read /write mask signal 3 output                    |
| 98        | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)         |
| 99 to 102 | MD28 to MD31 | I/O | SDRAM data                                               |
| 103       | GND25        | —   | Ground terminal (SDRAM I/O signal)                       |
| 104       | VDD25        | —   | Power supply terminal (+3.3V) (SDRAM I/O signal)         |
| 105       | VCLK         | I/O | System clock (not used)                                  |
| 106       | XCK_I/O_SEL  | I/O | 5.1ch/downmix switch signal output                       |
| 107       | VS           | O   | S1 signal output                                         |
| 108       | I/P SW       | O   | Progressive/interlace switch signal output               |
| 109       | CDSEL        | O   | CD-DA selection signal output                            |
| 110       | MREQ         | O   | Audio muting request signal output                       |
| 111       | VDDP         | —   | Power supply terminal (+3.3V) (I/O signal)               |
| 112       | GNDP         | —   | Ground terminal (I/O signal)                             |
| 113       | MDI          | O   | Serial data output to the D/A converter                  |
| 114       | MC           | O   | Serial data clock output to the D/A converter            |
| 115       | ML           | O   | Latch enable signal output to the D/A converter          |
| 116       | HIRQ2_       | I   | Busy signal input from the EEPROM                        |
| 117       | VDAC_4B      | —   | Video DAC bias bit 4 (connected to the ground)           |
| 118       | VDAC_VDD4    | —   | Power supply terminal (+3.3V) (Video DAC 4)              |
| 119       | VDAC_4       | O   | VDAC output 4                                            |
| 120       | VDAC_3B      | —   | Video DAC bias bit 3 (connected to the ground)           |
| 121       | VDAC_VDD3    | —   | Power supply terminal (+3.3V) (Video DAC 3)              |
| 122       | VDAC_3       | O   | VDAC output 3                                            |
| 123       | VDAC_2B      | —   | Video DAC bias bit 2 (connected to the ground)           |
| 124       | VDAC_VDD2    | —   | Power supply terminal (+3.3V) (Video DAC 2)              |
| 125       | VDAC_2       | O   | VDAC output 2                                            |
| 126       | VDAC_1B      | —   | Video DAC bias bit 1 (connected to the ground)           |
| 127       | VDAC_VDD1    | —   | Power supply terminal (+3.3V) (Video DAC 1)              |
| 128       | VDAC_1       | O   | VDAC output 1                                            |
| 129       | VDAC_0B      | —   | Video DAC bias bit 0 (connected to the ground)           |
| 130       | VDAC_VDD0    | —   | Power supply terminal (+3.3V) (Video DAC 0)              |
| 131       | VDAC_0       | O   | VDAC output 0                                            |
| 132       | VDAC_DVSS    | —   | Ground terminal (Video DAC digital system)               |
| 133       | VDAC_DVDD    | —   | Power supply terminal (+3.3V) (Video DAC digital system) |
| 134       | VDAC_REFVDD  | —   | Power supply terminal (Video DAC reference)              |
| 135       | VDAC_REF     | I   | Reference voltage input terminal(for Video DAC)          |
| 136       | VDAC_REFVSS  | —   | Ground terminal (Video DAC reference)                    |
| 137       | XVSS         | —   | Ground terminal (crystal oscillator)                     |
| 138       | XOUT         | O   | Crystal oscillation signal output                        |
| 139       | XIN          | I   | Crystal oscillation signal input                         |
| 140       | XVDD         | —   | Power supply terminal (crystal oscillator)               |
| 141       | AVSS2        | —   | Ground terminal (analog PLL)                             |
| 142       | AVDD2        | —   | Power supply terminal (+3.3V) (analog PLL)               |

| Pin No. | Pin Name                 | I/O | Description                                                    |
|---------|--------------------------|-----|----------------------------------------------------------------|
| 143     | AVDD1                    | —   | Power supply terminal (+3.3V) (analog PLL)                     |
| 144     | AVSS1                    | —   | Ground terminal (analog PLL)                                   |
| 145     | VDD                      | —   | Power supply terminal (+1.8V) (inside core)                    |
| 146     | GND                      | —   | Ground terminal (inside core)                                  |
| 147     | XCK                      | O   | Audio system clock output                                      |
| 148     | LRCK                     | O   | LRCK signal output for audio                                   |
| 149     | BCK                      | O   | BCK signal output for audio                                    |
| 150     | DATA0(DM)                | O   | Audio data(Down Mix signal) output                             |
| 151     | DATA1(FLR)               | O   | Audio data(Front L/R signal) output                            |
| 152     | VDDP                     | —   | Power supply terminal (+3.3V) (I/O signal)                     |
| 153     | GNDP                     | —   | Ground terminal (I/O signal)                                   |
| 154     | DATA2(SLR)               | O   | Audio data(Rear L/R signal) output                             |
| 155     | DATA3(CSW)               | O   | Audio data(Center/Subwoofer signal) output                     |
| 156     | IEC958                   | O   | S/PDIF signal (not used)                                       |
| 157     | DAI_DATA                 | I   | Data input from ADC (not used)                                 |
| 158     | DAI_BCK                  | I   | BCK signal input from ADC (not used)                           |
| 159     | DAI_LRCK                 | I   | LRCK signal input from ADC (not used)                          |
| 160     | I2C_CL                   | I/O | I2C clock bus                                                  |
| 161     | I2C_DA                   | I/O | I2C data bus                                                   |
| 162     | CS(ZIVA_E2P)             | O   | Chip select signal output to the EEPROM                        |
| 163     | RXD1                     | I   | Serial data input for check jig                                |
| 164     | TXD1                     | O   | Serial data output for check jig                               |
| 165     | WRITE_CTRL<br>(ZIVA_E2P) | O   | Write control signal output to the EEPROM                      |
| 166     | GNDP                     | —   | Ground terminal (I/O signal)                                   |
| 167     | VDDP                     | —   | Power supply terminal (+3.3V) (I/O signal)                     |
| 168     | SDDATA7                  | I   | SDBus data7 input                                              |
| 169     | SDDATA6                  | I   | SDBus data6 input                                              |
| 170     | SDDATA5                  | I   | SDBus data5 input                                              |
| 171     | SDDATA4                  | I   | SDBus data4 input                                              |
| 172     | GND                      | —   | Ground terminal (inside core)                                  |
| 173     | VDD                      | —   | Power supply terminal (+1.8V) (inside core)                    |
| 174     | SDDATA3                  | I   | SDBus data3 input                                              |
| 175     | SDDATA2                  | I   | SDBus data2 input                                              |
| 176     | SDDATA1                  | I   | SDBus data1 input                                              |
| 177     | SDDATA0                  | I   | SDBus data0 input                                              |
| 178     | SDREQ                    | O   | SDBus data request signal output                               |
| 179     | SDEN                     | I   | SDBus data enable signal input                                 |
| 180     | GNDP                     | —   | Ground terminal (I/O signal)                                   |
| 181     | VDDP                     | —   | Power supply terminal (+3.3V) (I/O signal)                     |
| 182     | SDERROR                  | I   | SDBus data error signal input                                  |
| 183     | SDCLK                    | I   | SDBus data clock input                                         |
| 184     | HIRQ1                    | I   | Interrupt signal input from the mechanism controller           |
| 185     | DRVCLK                   | I   | Serial data clock input from the mechanism controller          |
| 186     | DRVTX                    | I   | Serial data input from the mechanism controller and the EEPROM |
| 187     | DRVRX                    | I   | Serial data output to the mechanism controller and the EEPROM  |
| 188     | DRVRDY                   | O   | Ready signal input from the mechanism controller               |

| Pin No. | Pin Name | I/O | Description                                               |
|---------|----------|-----|-----------------------------------------------------------|
| 189     | VNW      | —   | Power supply for 5V tolerance voltage input               |
| 190     | ALE      | O   | Latch enable signal output for address data demux         |
| 191     | RST_SPC  | O   | Reset signal output to the mechanism controller           |
| 192     | INT/EXT  | O   | Input selection signal output for SDBus or ADC (not used) |
| 193     | HCS2     | O   | Chip select signal output for Medusa (not used)           |
| 194     | HCS1     | I/O | Not used                                                  |
| 195     | HCS0     | O   | Chip select signal output to the external ROM             |
| 196     | VDDP     | —   | Power supply terminal (+3.3V) (I/O signal)                |
| 197     | TRST     | I   | Reset signal input                                        |
| 198     | TDO      | O   | Data output                                               |
| 199     | TDI      | I   | Data input                                                |
| 200     | TMS      | I   | TMS signal input                                          |
| 201     | TCK      | I   | TCK signal input                                          |
| 202     | RESET    | I   | ZIVA reset input                                          |
| 203     | BUS CLK  | I/O | Not used                                                  |
| 204     | GND      | —   | Ground terminal (inside core)                             |
| 205     | VDD      | —   | Power supply terminal (+1.8V) (inside core)               |
| 206     | HA3      | I/O | Address bus 3                                             |
| 207     | HA2      | I/O | Address bus 2                                             |
| 208     | GNDP     | —   | Ground terminal (I/O signal)                              |

## • MB03 BOARD IC701 TMC57929PGF-RDP (DVD DECODER)

| Pin No. | Pin Name     | I/O | Description                                            |
|---------|--------------|-----|--------------------------------------------------------|
| 1, 2    | D5, D6       | I/O | Two-way data bus with CXP973064-226R                   |
| 3       | VSS          | —   | Ground                                                 |
| 4       | D7           | I/O | Two-way data bus with CXP973064-226R                   |
| 5       | A0           | I   | Address signal input from CXP973064-226R               |
| 6       | VDD          | —   | Power supply (+3.3V)                                   |
| 7       | A1           | I   | Address signal input from CXP973064-226R               |
| 8       | VDD5V        | —   | Power supply (+5V)                                     |
| 9 to 14 | A2 to A7     | I   | Address signal input from CXP973064-226R               |
| 15      | VSS          | —   | Ground                                                 |
| 16      | XWAIT        | O   | Not used                                               |
| 17      | XRD          | I   | Read strobe signal input from CXP973064-226R           |
| 18      | XWR          | I   | Write strobe signal input from CXP973064-226R          |
| 19      | XCS          | I   | Chip select signal input from CXP973064-226R           |
| 20, 21  | XINT0, XINT1 | O   | Interrupt signal output to CXP973064-226R              |
| 22      | VDD          | —   | Power supply (+3.3V)                                   |
| 23      | XHRS         | I   | Not used                                               |
| 24      | HDB7         | O   | Stream data signal output to ZIVA5X-C1F                |
| 25      | VSS          | —   | Ground                                                 |
| 26      | HDB8         | O   | Error flag signal output to ZIVA5X-C1F                 |
| 27      | HDB6         | O   | Stream data signal output to ZIVA5X-C1F                |
| 28      | VDDS         | —   | Power supply (+5V)                                     |
| 29      | HDB9         | O   | Not used                                               |
| 30      | HDB5         | O   | Stream data signal output to ZIVA5X-C1F                |
| 31      | HDBA         | O   | Not used                                               |
| 32      | HDB4         | O   | Stream data signal output to ZIVA5X-C1F                |
| 33      | VSS          | —   | Ground                                                 |
| 34      | HDBB         | O   | Not used                                               |
| 35      | HDB3         | O   | Stream data signal output to ZIVA5X-C1F                |
| 36      | VDD          | —   | Power supply (+3.3V)                                   |
| 37      | HDBC         | O   | Not used                                               |
| 38      | VDDS         | —   | Power supply (+5V)                                     |
| 39      | HDB2         | O   | Stream data signal output to ZIVA5X-C1F                |
| 40      | HDBD         | O   | Not used                                               |
| 41      | HDB1         | O   | Stream data signal output to ZIVA5X-C1F                |
| 42      | VSS          | —   | Ground                                                 |
| 43      | HDBE         | O   | Not used                                               |
| 44      | HDB0         | O   | Stream data signal output to ZIVA5X-C1F                |
| 45      | HDBF         | O   | Not used                                               |
| 46      | XSAK         | O   | Serial data effect flag signal output to ZIVA5X-C1F    |
| 47      | VDDS         | —   | Power supply terminal (+5V) (digital system)           |
| 48      | XDCK         | O   | Serial data transfer clock signal output to ZIVA5X-C1F |
| 49      | XSHD         | O   | Header flag signal (Not used)                          |
| 50      | VDD          | —   | Power supply (+3.3V)                                   |
| 51      | REDY         | O   | Not used                                               |
| 52      | VSS          | —   | Ground                                                 |

| Pin No.    | Pin Name     | I/O | Description                                                                 |
|------------|--------------|-----|-----------------------------------------------------------------------------|
| 53         | XHAC         | I   | DVD mode: Serial data request signal input from ZIVA5X-C1F                  |
| 54         | HINT         | O   | Not used (Pull up)                                                          |
| 55         | XS16         | O   | Not used (Pull up)                                                          |
| 56         | HA1          | I   | Not used (Pull up)                                                          |
| 57         | XPDI         | I/O | Not used (Pull up)                                                          |
| 58         | VDDS         | —   | Power supply (+5V)                                                          |
| 59, 60     | HA0, HA2     | I   | Not used (Pull up)                                                          |
| 61         | VSS          | —   | Ground (open)                                                               |
| 62, 63     | HCS0, HCS1   | I   | Not used                                                                    |
| 64         | VDD          | —   | Power supply (+3.3V)                                                        |
| 65         | DASP         | I/O | Not used                                                                    |
| 66 to 69   | MDB0 to MDB3 | I/O | Two-way data bus with the D-RAM                                             |
| 70         | VSS          | —   | Ground                                                                      |
| 71         | MDB4         | I/O | Two-way data bus with the D-RAM                                             |
| 72         | VDD5V        | —   | Power supply (+5V)                                                          |
| 73 to 75   | MDB5 to MDB7 | I/O | Two-way data bus with the D-RAM                                             |
| 76         | XMWR         | O   | Write enable signal output to the D-RAM                                     |
| 77         | VDD          | —   | Power supply (+3.3V)                                                        |
| 78         | XRAS         | O   | Row address strobe signal output to the D-RAM                               |
| 79, 80     | MA0, MA1     | O   | Address signal output to the D-RAM                                          |
| 81         | VSS          | —   | Ground                                                                      |
| 82 to 87   | MA2 to MA7   | O   | Address signal output to the D-RAM                                          |
| 88         | VDD          | —   | Power supply (+3.3V)                                                        |
| 89         | MA8          | O   | Address signal output to the D-RAM                                          |
| 90         | VSS          | —   | Ground                                                                      |
| 91         | MA9/MNT0     | O   | Address signal output to the D-RAM                                          |
| 92         | MNT1/MNT1    | O   | EEPROM ready signal output to CXP973064                                     |
| 93         | MNT2/MNT2    | O   | Address signal output to the D-RAM                                          |
| 94         | XMOE         | O   | Output enable signal output to the D-RAM                                    |
| 95         | XCAS         | O   | Column address strobe signal output to the D-RAM                            |
| 96, 97     | MDB8, MDB9   | I/O | Two-way data bus with the D-RAM                                             |
| 98         | VSS          | —   | Ground                                                                      |
| 99         | MDBA         | I/O | Two-way data bus with the D-RAM                                             |
| 100        | VDD          | —   | Power supply (+3.3V)                                                        |
| 101, 102   | MDBB, MDBC   | I/O | Two-way data bus with the D-RAM                                             |
| 103        | VDD5V        | —   | Power supply (+5V)                                                          |
| 104 to 106 | MDBD to MDBF | I/O | Two-way data bus with the D-RAM                                             |
| 107        | GFS          | O   | Guard frame sync signal output to CXP973064-226R                            |
| 108        | VSS          | —   | Ground                                                                      |
| 109        | APEO         | O   | Absolute phase error signal output                                          |
| 110        | VDD          | —   | Power supply (+3.3V)                                                        |
| 111        | DASYO        | O   | RF binary signal output                                                     |
| 112        | GND A5       | —   | Ground                                                                      |
| 113, 114   | ASF1, AFS2   | —   | Filter connected terminal for selection the constant asymmetry compensation |
| 115        | DASYI        | I   | Analog signal input after integrated from the RF binary signal              |
| 116        | RFDCC        | I   | Input terminal for adjusting DC cut high-pass filter for RF signal          |

| Pin No.  | Pin Name     | I/O | Description                                                                     |
|----------|--------------|-----|---------------------------------------------------------------------------------|
| 117      | RFIN         | I   | RF signal input from the CD/DVD RF amplifier                                    |
| 118, 119 | VCCA5, VCCA4 | —   | Power supply (+3.3V)                                                            |
| 120      | VCOR1        | —   | VCO oscillating range setting resistor connected                                |
| 121      | VCOIN        | I   | VCO input                                                                       |
| 122, 123 | GND44, GND43 | —   | Ground                                                                          |
| 124      | LPF5         | O   | Signal output from the operation amplifier from PLL loop filter                 |
| 125      | VC1          | I   | Middle point voltage (+1.65V) input                                             |
| 126, 127 | LPF2, LPF1   | I   | Inverted signal input to the operation amplifier from PLL loop filter           |
| 128, 129 | VCCA3, VCCA2 | —   | Power supply (+3.3V)                                                            |
| 130      | PDO          | O   | Signal output from the charge pump for phase comparator                         |
| 131      | PDHVCC       | I   | Middle point voltage input terminal for RF PLL                                  |
| 132      | FDO          | O   | Signal output from the charge pump for frequency comparator                     |
| 133, 134 | GND42, GND41 | —   | Ground                                                                          |
| 135      | SPO          | O   | Spindle motor control signal output to FAN8035L                                 |
| 136      | VC2          | I   | Middle point voltage (+1.65V) input                                             |
| 137      | MDIN2        | I   | Spindle motor servo drive signal input                                          |
| 138      | MDIN1        | I   | MDP input                                                                       |
| 139      | VCCA1        | —   | Power supply (+3.3V)                                                            |
| 140      | CLVS         | O   | Control signal output for selection the spindle control filter constant at CLVS |
| 141      | VSS          | —   | Ground                                                                          |
| 142      | MDSOUT       | O   | Frequency error output terminal of internal CLV circuit                         |
| 143      | VDD          | —   | Power supply (+3.3V)                                                            |
| 144      | MDPOUT       | O   | Phase error output of internal CLV circuit                                      |
| 145      | DEFECT       | I   | Defect signal input (Not used)                                                  |
| 146      | GSCOR        | I   | Guard subcode sync (S0+S1) detection signal input from CXD3068Q                 |
| 147      | EXCK         | O   | Subcode serial data reading clock signal output to CXD3068Q                     |
| 148      | SBIN         | I   | Subcode serial data input from CXD3068Q                                         |
| 149      | VSS          | —   | Ground                                                                          |
| 150      | SCOR         | I   | Subcode sync (S0+S1) detection signal input from CXD3068Q                       |
| 151      | WFCK         | I   | Write frame clock signal input from CXD3068Q                                    |
| 152      | VDD5V        | —   | Power supply (+5V)                                                              |
| 153      | XRCI         | I   | Not used (Pull down)                                                            |
| 154      | VDDS         | —   | Power supply (+5V)                                                              |
| 155      | C2PO         | I   | C2 pointer signal input from CXD3068Q                                           |
| 156      | VDD          | —   | Power supply (+3.3V)                                                            |
| 157      | DBCK         | O   | Bit clock signal (2.8224 MHz) output (Not used)                                 |
| 158      | BCLK         | I   | Bit clock signal (2.8224 MHz) input from CXD3068Q                               |
| 159      | DDAT         | O   | PCM data (Not used)                                                             |
| 160      | MDAT         | I   | Serial data input from CXD3068Q                                                 |
| 161      | VSS          | —   | Ground                                                                          |
| 162      | DLRC         | O   | L/R sampling clock signal (Not used)                                            |
| 163      | LRCK         | I   | L/R sampling clock signal (44.1 kHz) input from CXD3068Q                        |
| 164      | XRST         | I   | Reset signal input from CXP973064-226R “L”: reset                               |
| 165      | IFS0         | I   | Not used (connected to ground)                                                  |
| 166      | IFS1         | I   | Not used (connected to VDD)                                                     |
| 167      | XTAL         | I   | 33.8688 MHz clock signal input from SM8707GV                                    |

| Pin No.    | Pin Name | I/O | Description                              |
|------------|----------|-----|------------------------------------------|
| 168        | VSS      | —   | Ground                                   |
| 169        | XTA2     | O   | System clock output (33.8688 MHz)        |
| 170        | XTA1     | I   | System clock input (33.8688 MHz)         |
| 171        | VDD      | —   | Power supply (+3.3V)                     |
| 172 to 176 | D0 to D4 | I/O | Two-way data bus with the CXP973064-226R |

## • MB03 BOARD IC901 CXP973064-232R (MECHANISM CONTROLLER)

| Pin No.  | Pin Name       | I/O | Description                                                                                |
|----------|----------------|-----|--------------------------------------------------------------------------------------------|
| 1        | NO_USE         | O   | Not used                                                                                   |
| 2        | SDEN           | O   | Serial data enable signal output to SP3723BDAOPM                                           |
| 3        | DOCTRL         | O   | Digital out on/off control signal output to CXD3068Q                                       |
| 4        | XRST_2753      | O   | Not used                                                                                   |
| 5        | SDA_EEP        | I/O | Data bus with the EEPROM                                                                   |
| 6        | MNT1           | I   | EEPROM ready signal input from TMC57929PGF-RDP                                             |
| 7        | FCS_JMP_1      | O   | Focus jump 1 signal output to the FAN8035L                                                 |
| 8        | FCS_JMP_2      | O   | Focus jump 2 signal output to the FAN8035L                                                 |
| 9        | SENS_CD        | I   | Internal status (SENSE) signal input from CXD3068Q                                         |
| 10       | CDSP2          | O   | Not used                                                                                   |
| 11       | CDSP4          | O   | Not used                                                                                   |
| 12       | XCS_DVD        | O   | Chip select signal output to TMC57929PGF-RDP                                               |
| 13       | VSS            | —   | Ground                                                                                     |
| 14 to 21 | D0 to D7       | I/O | Two-way data bus with TMC57929PGF-RDP                                                      |
| 22       | INIT0_DVD      | I   | Interrupt signal input from TMC57929PGF-RDP                                                |
| 23       | INIT1_DVD      | I   | Interrupt signal input from TMC57929PGF-RDP                                                |
| 24       | MSCK_SAMBA     | O   | Not used                                                                                   |
| 25       | XRST_1882      | O   | Reset signal output to TMC57929PGF-RDP                                                     |
| 26       | SCOR           | I   | Subcode sync (S0+S1) detection signal input from CXD3068Q                                  |
| 27       | LAT_CD         | O   | Serial data latch pulse signal output to CXD3068Q                                          |
| 28       | LD ON          | O   | Laser diode on/off control signal output to SP3723BDAOPM                                   |
| 29       | MIRR           | I   | Mirror signal input from SP3723BDAOPM                                                      |
| 30       | COUT_CD        | I   | Numbers of track counted signal input from SP3723BDAOPM                                    |
| 31       | INLIM          | I   | Detection signal input from limit in switch The optical pick-up is inner position when “H” |
| 32       | CS_ZIVA        | O   | Chip select signal output to ZIVA5X-C1F                                                    |
| 33       | SI_ZIVA        | I   | Serial data input from ZIVA5X-C1F                                                          |
| 34       | SO_ZIVA        | O   | Serial data output to ZIVA5X-C1F                                                           |
| 35       | SCK_ZIVA       | O   | Serial data transfer clock signal output to ZIVA5X-C1F                                     |
| 36       | DRVIRQ         | O   | Interrupt request signal output to ZIVA5X-C1F                                              |
| 37       | DRVRDY         | O   | Ready signal output to ZIVA5X-C1F                                                          |
| 38       | RST            | I   | System reset signal input from ZIVA5X-C1F                                                  |
| 39       | VSS            | —   | Ground                                                                                     |
| 40       | XTAL           | I   | System clock input terminal (20 MHz)                                                       |
| 41       | EXTAL          | O   | System clock output terminal (20 MHz)                                                      |
| 42       | VDD            | —   | Power supply (+3.3V)                                                                       |
| 43, 44   | SLED_A, SLED_B | O   | Sled motor drive signal output to FAN8035L                                                 |
| 45       | SCK_DSD        | O   | Clock output to TMC57929PGF-RDP                                                            |
| 46       | SDOUT_DSD      | O   | Serial data output Not used                                                                |
| 47       | SDIN_DSD       | I   | Serial data input Not used                                                                 |
| 48       | READY_DSD      | I   | Ready signal input Not used                                                                |
| 49       | DATA_CD        | O   | Serial data output to CXD3068Q                                                             |
| 50       | CLOK_CD        | O   | Serial data transfer clock signal output to CXD3068Q                                       |
| 51       | XMSLAT         | O   | Serial data latch pulse signal Not used                                                    |
| 52       | SQSO           | I   | Subcode Q data input from TMC57929PGF-RDP                                                  |
| 53       | MUTE_DSD       | O   | Muting on/off control signal Not used                                                      |

| Pin No.  | Pin Name  | I/O | Description                                                   |
|----------|-----------|-----|---------------------------------------------------------------|
| 54       | SQCK      | O   | Subcode Q data reading clock signal output to TMC57929PGF-RDP |
| 55       | VSS       | —   | Ground                                                        |
| 56       | CONTROL_2 | I   | Not used                                                      |
| 57       | CONTROL_1 | I   | Not used                                                      |
| 58       | GFS_DVD   | I   | Guard frame sync signal input from TMC57929PGF-RDP            |
| 59       | MUTE_CD   | O   | Muting on/off control signal output to CXD3068Q               |
| 60       | MUTE_2D   | O   | Muting on/off control signal output to FAN8035L               |
| 61       | SLED      | I   | Sled motor servo drive PWM signal input from CXD3068Q         |
| 62       | FG        | I   | Spindle motor control signal input from SP3723BDAOPM          |
| 63       | SP_ON     | O   | Muting on/off control signal output to FAN 8035L              |
| 64       | JIT       | I   | Jitter signal input                                           |
| 65       | TE        | I   | Tracking error signal input from SP3723BDAOPM                 |
| 66       | PI        | I   | Pull in signal input from SP3723BDAOPM                        |
| 67       | FE        | I   | Focus error signal input from SP3723BDAOPM                    |
| 68       | AVSS      | —   | Ground                                                        |
| 69       | AVREF     | I   | Reference voltage input (for A/D converter)                   |
| 70       | AVDD      | —   | Power supply (+3.3V) (for A/D converter)                      |
| 71       | GFS_CD    | I   | Guard frame sync signal input from CXD3068Q                   |
| 72       | SCLK_CD   | O   | SENSE serial data reading clock signal output to CXD3068Q     |
| 73       | TSD-M     | O   | Thermal shut down signal output to FAN8035L                   |
| 74       | FOK_CD    | I   | Focus OK signal input from CXD3068Q                           |
| 75       | LOCK_CD   | I   | GFS is sampled by 460 Hz “H” input when GFS is “H”            |
| 76       | LDSEL     | O   | Laser diode selection signal output                           |
| 77       | SACD/DVD  | O   | SACD/DVD selection signal output                              |
| 78       | I2C_SIO   | I/O | Communication data bus input/output                           |
| 79       | I2C-SCL   | I/O | Communication data reading clock signal input/output          |
| 80       | RXD       | I   | Serial data input from the RS-232C (for check)                |
| 81       | TXD       | O   | Serial data output to the RS-232C (for check)                 |
| 82       | SDCLK_RF  | O   | Serial data transfer clock signal output to SP3723BDAOPM      |
| 83       | SDATA_RF  | I/O | Two-way data bus with SP3723BDAOPM                            |
| 84       | XWR       | O   | Write strobe signal output to TMC57929PGF-RDP                 |
| 85       | XRD       | O   | Read strobe signal output to TMC57929PGF-RDP                  |
| 86       | (PWE)     | —   | Not used                                                      |
| 87       | VDD       | —   | Power supply (+3.3V)                                          |
| 88       | VSS       | —   | Ground                                                        |
| 89 to 96 | A0 to A7  | O   | Address signal output to TMC57929PGF-RDP                      |
| 97       | A8        | O   | Motor/coil driver power save control signal Not used          |
| 98       | XDRST     | O   | Reset signal output                                           |
| 99       | WP_EEP    | O   | Write protect signal output to the EEPROM                     |
| 100      | CLK_EEP   | O   | Clock signal output to the EEPROM                             |

## • MAIN BOARD IC1104 M30620MCN-A29FP (SYSTEM CONTROLLER)

| Pin No.  | Pin Name                    | I/O | Description                                                                                                                                                |
|----------|-----------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1        | S-OUT                       | O   | Serial data output to the front panel controller                                                                                                           |
| 2        | S-CLK                       | O   | Serial data transfer clock signal output to the front panel controller                                                                                     |
| 3        | 61530-CLK                   | O   | Serial data transfer clock signal output to the M62530FP-D60G                                                                                              |
| 4        | SIRCS                       | I   | Remote control signal input from the remote control receiver                                                                                               |
| 5        | 61530-DAT                   | O   | Serial data output to the M62530FP-D60G                                                                                                                    |
| 6        | 61529-DAT                   | O   | Serial data output to the M62529FP-D60G                                                                                                                    |
| 7        | 61529-CLK                   | O   | Serial data transfer clock signal output to the M62529FP-D60G                                                                                              |
| 8        | BYTE                        | I   | External data bus line byte selection signal input terminal “L”: 16 bit, “H”: 8 bit (fixed at “L”)                                                         |
| 9        | CNVSS                       | —   | Not used                                                                                                                                                   |
| 10       | XCIN                        | I   | Sub system clock input terminal (32.768 kHz)                                                                                                               |
| 11       | XCOUT                       | O   | Sub system clock output terminal (32.768 kHz)                                                                                                              |
| 12       | RESET                       | I   | System reset signal input from the reset switch “L”: reset<br>For several hundreds msec. after the power supply rises, “L” is input, then it change to “H” |
| 13       | XOUT                        | O   | Main system clock output terminal (16MHz)                                                                                                                  |
| 14       | VSS                         | —   | Ground terminal                                                                                                                                            |
| 15       | XIN                         | I   | Main system clock input terminal (16MHz)                                                                                                                   |
| 16       | VCC                         | —   | Power supply terminal (+3.3V)                                                                                                                              |
| 17       | NMI                         | I   | Non-maskable interrupt input Fixed at “H” in this set                                                                                                      |
| 18       | AC-CUT                      | I   | AC off detection signal input from the level detect “L”: AC cut checked                                                                                    |
| 19       | VIDEO-OUT-SW                | O   | Video out select signal output terminal “H”: DVD mode, “L”: other mode Not used                                                                            |
| 20       | RDS-INT                     | I   | Serial data reading clock signal input terminal Not used                                                                                                   |
| 21       | RDS-DATA                    | I   | Serial data input terminal Not used                                                                                                                        |
| 22       | ST-MUTE                     | O   | Tuner muting control signal output to the FM/AM tuner unit “L”: muting on                                                                                  |
| 23       | STEREO                      | I   | FM stereo detection signal input from the FM/AM tuner unit “L”: stereo                                                                                     |
| 24       | TUNED                       | I   | Tuning detection signal input from the FM/AM tuner unit “L”: tuned                                                                                         |
| 25       | ST-CE                       | O   | PLL serial chip enable signal output to the FM/AM tuner unit                                                                                               |
| 26       | ST-DOUT                     | O   | PLL serial data output to the FM/AM tuner unit                                                                                                             |
| 27       | ST-DIN                      | I   | PLL serial data input from the FM/AM tuner unit                                                                                                            |
| 28       | ST-CLK                      | O   | PLL serial data transfer clock signal output to the FM/AM tuner unit                                                                                       |
| 29       | IIC-CLK                     | I/O | IIC data reading clock signal input or transfer clock signal output                                                                                        |
| 30       | IIC-DAT                     | I/O | IIC two-way data bus                                                                                                                                       |
| 31       | SYS-POWER                   | O   | CD/DVD power on/off control signal output terminal “H”: CD on                                                                                              |
| 32       | SYS-RESET                   | O   | System reset signal output to the ZIVA5X-CIF                                                                                                               |
| 33       | M-REQ                       | I   | DAC muting request signal input from the ZIVA5X-CIF                                                                                                        |
| 34, 35   | VIDEO-MUTE1,<br>VIDEO-MUTE2 | O   | Video muting on/off control signal output terminal “L”: muting on                                                                                          |
| 36       | DAC-MUTE                    | O   | Muting on/off control signal output “L”: muting (front speaker)                                                                                            |
| 37       | SURROUND-MUTE               | O   | Muting on/off control signal output “L”: muting (surround speaker)                                                                                         |
| 38       | CENTER-MUTE                 | O   | Muting on/off control signal output “L”: muting (center speaker)                                                                                           |
| 39 to 41 | I-BASS F3 to<br>I-BASS F1   | O   | I-BASS f0 control signal output terminal                                                                                                                   |
| 42       | I-BASS +10dB                | O   | I-BASS +10db control signal output terminal                                                                                                                |
| 43       | I-BASS +8dB                 | O   | I-BASS +8db control signal output terminal                                                                                                                 |
| 44       | I-BASS +6dB                 | O   | I-BASS +6db control signal output terminal                                                                                                                 |
| 45       | I-BASS +5dB                 | O   | I-BASS +5db control signal output terminal                                                                                                                 |

| Pin No.  | Pin Name                      | I/O | Description                                                                                               |
|----------|-------------------------------|-----|-----------------------------------------------------------------------------------------------------------|
| 46       | I-BASS ON/OFF                 | O   | I-BASS on/off control signal output terminal                                                              |
| 47       | TBL-POS                       | O   | Table motor drive signal (clockwise) output terminal                                                      |
| 48       | TBL-NEG                       | O   | Table motor drive signal (counterclockwise) output terminal                                               |
| 49       | LOD-POS                       | O   | Loding motor drive signal output (load-out direction)                                                     |
| 50       | LOD-NEG                       | O   | Loding motor drive signal output (load-in direction)                                                      |
| 51 to 53 | ENCODER-SW1 to<br>ENCODER-SW3 | I   | Rotary encoder pulse input from the CD/DVD mechanism deck section                                         |
| 54       | EJECT-SW                      | I   | Detection input from the tray open/close detect switch<br>“L”: when tray is close, “H”: when tray is open |
| 55       | T-SENS                        | I   | CD/DVD table address detection signal input terminal                                                      |
| 56       | HP-SW                         | I   | Connection detection signal input of the headphone jack<br>“L”: no connected, “H”: headphone connected    |
| 57       | MIC-SW                        | I   | Connection detection signal input of the microphone jack<br>“L”: no connected, “H”: headphone connected   |
| 58       | A-TRG                         | O   | Deck-A side trigger plunger drive signal output “H”: plunger on                                           |
| 59       | B-TRG                         | O   | Deck-B side trigger plunger drive signal output “H”: plunger on                                           |
| 60       | A-SHUT-IN                     | I   | Shut off detection signal input from the deck-A side reel pulse detector                                  |
| 61       | B-SHUT-IN                     | I   | Shut off detection signal input from the deck-B side reel pulse detector                                  |
| 62       | VCC                           | —   | Power supply terminal (+3.3V)                                                                             |
| 63       | SWFR-MUTE                     | O   | Muting on/off control signal output “L”: muting (sub woofer)                                              |
| 64       | VSS                           | —   | Ground terminal                                                                                           |
| 65       | CAPM-CONT                     | O   | Capstan motor drive signal output “H”: active                                                             |
| 66       | B-REC FWD                     | O   | Detection input from the deck-B record detect switch (forward direction)                                  |
| 67       | B-REC REV                     | O   | Detection input from the deck-B record detect switch (reverse direction)                                  |
| 68       | A-HALF                        | I   | Detection input from the deck-A cassette detect switch “L”: cassette in, “H”: no cassette                 |
| 69       | B-HALF                        | I   | Detection input from the deck-B cassette detect switch “L”: cassette in, “H”: no cassette                 |
| 70       | A-PLAY                        | I   | Detection input from the deck-A play detect switch “H”: deck-A play                                       |
| 71       | B-PLAY                        | I   | Detection input from the deck-B play detect switch “H”: deck-B play                                       |
| 72       | AMS-IN                        | I   | Automatic music sensor detection signal input terminal                                                    |
| 73       | DISPLAY-KEY                   | I   | Display key input terminal (A/D input)                                                                    |
| 74       | POWER-KEY                     | I   | Power key input terminal (A/D input)                                                                      |
| 75       | M-RESET                       | O   | System reset signal output to the front panel controller                                                  |
| 76       | STANDBY-LED                   | O   | LED drive signal output of the standby indicator “L”: LED on                                              |
| 77       | BIAS                          | O   | Recording bias on/off control signal output “H”: bias on                                                  |
| 78       | PB-A/B                        | O   | Deck-A/B selection signal output “H”: deck-A, “L”: deck-B                                                 |
| 79       | TC-RELAY                      | O   | Recording/playback select signal output to the REC/PB switch “L”: recording                               |
| 80       | PB-MUTE                       | O   | Playing muting on/off control signal output terminal “L”: muting on                                       |
| 81       | REC-MUTE                      | O   | Recording muting on/off control signal output terminal “L”: muting on                                     |
| 82       | FAN-CONTROL                   | O   | Fan motor drive signal output “H”: active                                                                 |
| 83       | LINEOUT-MUTE                  | O   | Muting on/off control signal output “L”: muting (line out (MD/VIDEO))                                     |
| 84       | LINE-MUTE                     | O   | line muting on/off control signal output “L”: muting                                                      |
| 85       | STK-MUTE                      | O   | Power amplifier on/off selection signal output terminal “L”: muting                                       |
| 86       | PROTECT                       | I   | Protect on/off signal input terminal “L”: protect                                                         |
| 87       | STB-RELAY                     | O   | Main power on/off relay drive signal output terminal “H”: power on                                        |
| 88       | FRONT-RELAY                   | O   | Front speaker on/off relay drive signal output terminal “H”: front speaker on                             |
| 89       | REAR-RELAY                    | O   | Rear and center speakers on/off relay drive signal output terminal<br>“H”: rear and center speakers on    |

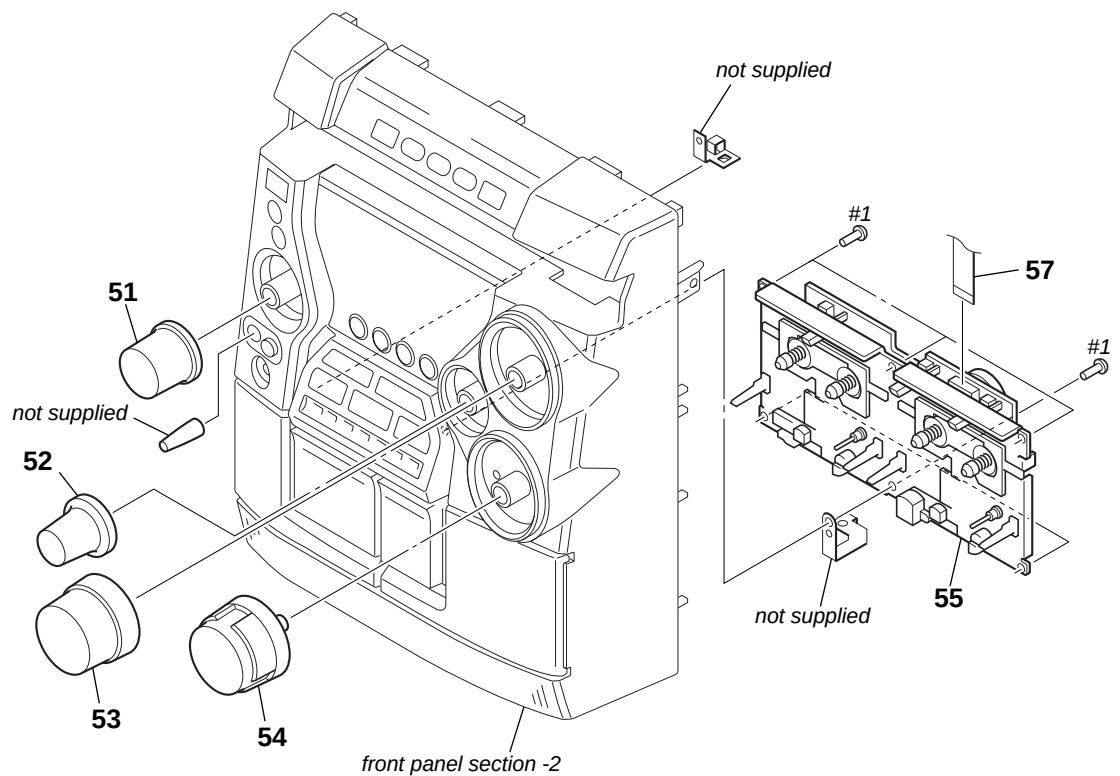
| Pin No. | Pin Name              | I/O | Description                                             |
|---------|-----------------------|-----|---------------------------------------------------------|
| 90      | NO-USE                | —   | Not used                                                |
| 91, 92  | VACS-IN1,<br>VACS-IN2 | I   | VACS input terminal                                     |
| 93      | NO-USE                | —   | Not used                                                |
| 94      | MODEL-IN              | I   | Model selection signal input terminal                   |
| 95      | DEST-IN               | I   | Destination setting terminal                            |
| 96      | AVSS                  | —   | Ground terminal                                         |
| 97      | I-HOLD                | O   | Fan on/off control signal output terminal   “L”: fan on |
| 98      | V.REF                 | I   | Reference voltage (+3.5V) input terminal                |
| 99      | AVCC                  | —   | Power supply terminal (+3.3V)                           |
| 100     | S-IN                  | I   | Serial data input from the front panel controller       |

**• MICON-KEY BOARD IC101 uPD780232GC-082-8BT (FRONT PANEL CONTROLLER)**

| Pin No.  | Pin Name     | I/O | Description                                                                  |
|----------|--------------|-----|------------------------------------------------------------------------------|
| 1        | VDD          | —   | Power supply terminal (+5V)                                                  |
| 2        | VSS          | —   | Ground terminal                                                              |
| 3        | X1           | I   | System clock input terminal (5MHz)                                           |
| 4        | X2           | O   | System clock output terminal (5MHz)                                          |
| 5        | IC           | —   | Not used                                                                     |
| 6        | RESET        | I   | System reset signal input from the system controller                         |
| 7        | S-CLK        | I   | Serial data transfer clock signal input from the system controller           |
| 8        | S-IN         | O   | Serial data output to the system controller                                  |
| 9        | S-OUT        | I   | Serial data input from the system controller                                 |
| 10       | BASS-A       | I   | Jog dial pulse input from the rotary encoder (BASS) (A phase input)          |
| 11       | BASS-B       | I   | Jog dial pulse input from the rotary encoder (BASS) (B phase input)          |
| 12       | TRE/MID-A    | I   | Jog dial pulse input from the rotary encoder (TREBLE/MIDDLE) (A phase input) |
| 13       | TRE/MID-B    | I   | Jog dial pulse input from the rotary encoder (TREBLE/MIDDLE) (B phase input) |
| 14       | MULTI-A      | I   | Jog dial pulse input from the rotary encoder (MULTI JOG) (A phase input)     |
| 15       | MULTI-B      | I   | Jog dial pulse input from the rotary encoder (MULTI JOG) (B phase input)     |
| 16       | VOL-A        | I   | Jog dial pulse input from the rotary encoder (VOLUME) (A phase input)        |
| 17       | VOL-B        | I   | Jog dial pulse input from the rotary encoder (VOLUME) (B phase input)        |
| 18       | AVSS         | —   | Ground terminal                                                              |
| 19       | NC           | —   | Not used                                                                     |
| 20 to 22 | KEY2 to KEY0 | I   | Key input terminal (A/D input)                                               |
| 23       | VSS          | —   | Ground terminal                                                              |
| 24       | AVDD         | —   | Power supply terminal (+5V)                                                  |
| 25       | VDD          | —   | Power supply terminal (+5V)                                                  |
| 26       | DVD-LED      | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 27       | TUNER-LED    | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 28       | TAPE-LED     | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 29       | MD-LED       | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 30       | I-BASS-LED   | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 31       | HEAVY-LED    | O   | LED drive signal output terminal “L”: LED on                                 |
| 32       | VOCAL-LED    | O   | LED drive signal output terminal “L”: LED on                                 |
| 33       | SALSA-LED    | O   | LED drive signal output terminal “L”: LED on                                 |
| 34       | MANUAL-LED   | O   | LED drive signal output terminal “L”: LED on                                 |
| 35       | HIP_HOP-LED  | O   | LED drive signal output terminal “L”: LED on                                 |
| 36       | TECHNO-LED   | O   | LED drive signal output terminal “L”: LED on                                 |
| 37       | MULTI-LED    | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 38       | DISC1-LED    | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 39       | DISC2-LED    | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 40       | DISC3-LED    | O   | LED drive signal output terminal “L”: LED on Not used                        |
| 41       | E-CLK        | —   | Not used                                                                     |
| 42       | E-LAT        | —   | Not used                                                                     |
| 43       | E-DAT        | —   | Not used                                                                     |
| 44 to 58 | S1 to S14    | O   | Segment drive signal output to the fluorescent indicator tube                |
| 59       | VDD          | —   | Power supply terminal (+5V)                                                  |
| 60       | V.LOAD       | —   | Power supply terminal (–25V) (for fluorescent indicator tube drive)          |
| 61 to 68 | S15 to S22   | O   | Segment drive signal output to the fluorescent indicator tube                |
| 69 to 80 | G12 to G1    | O   | Grid drive signal output to the fluorescent indicator tube                   |

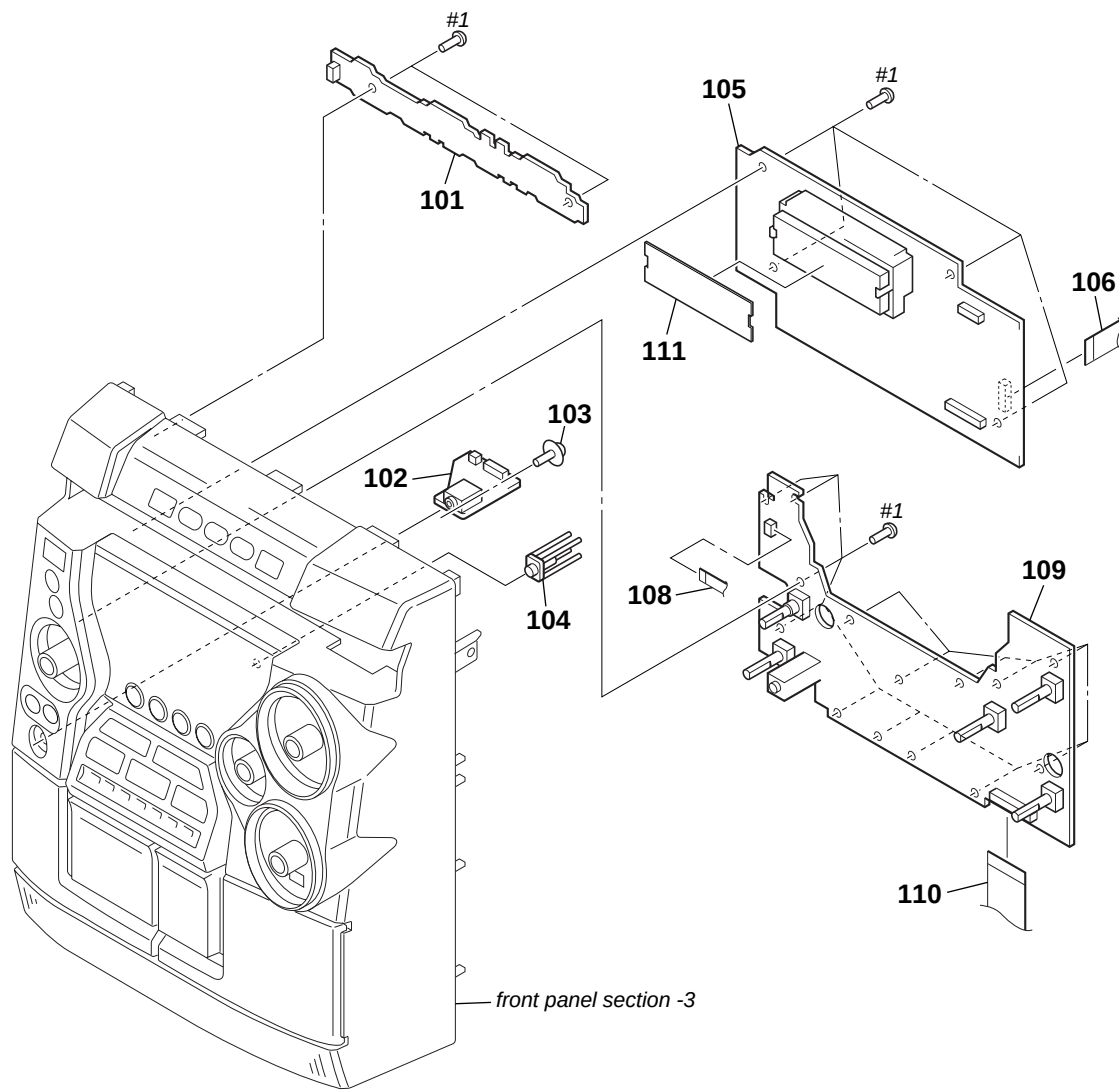


7-2. FRONT PANEL SECTION-1



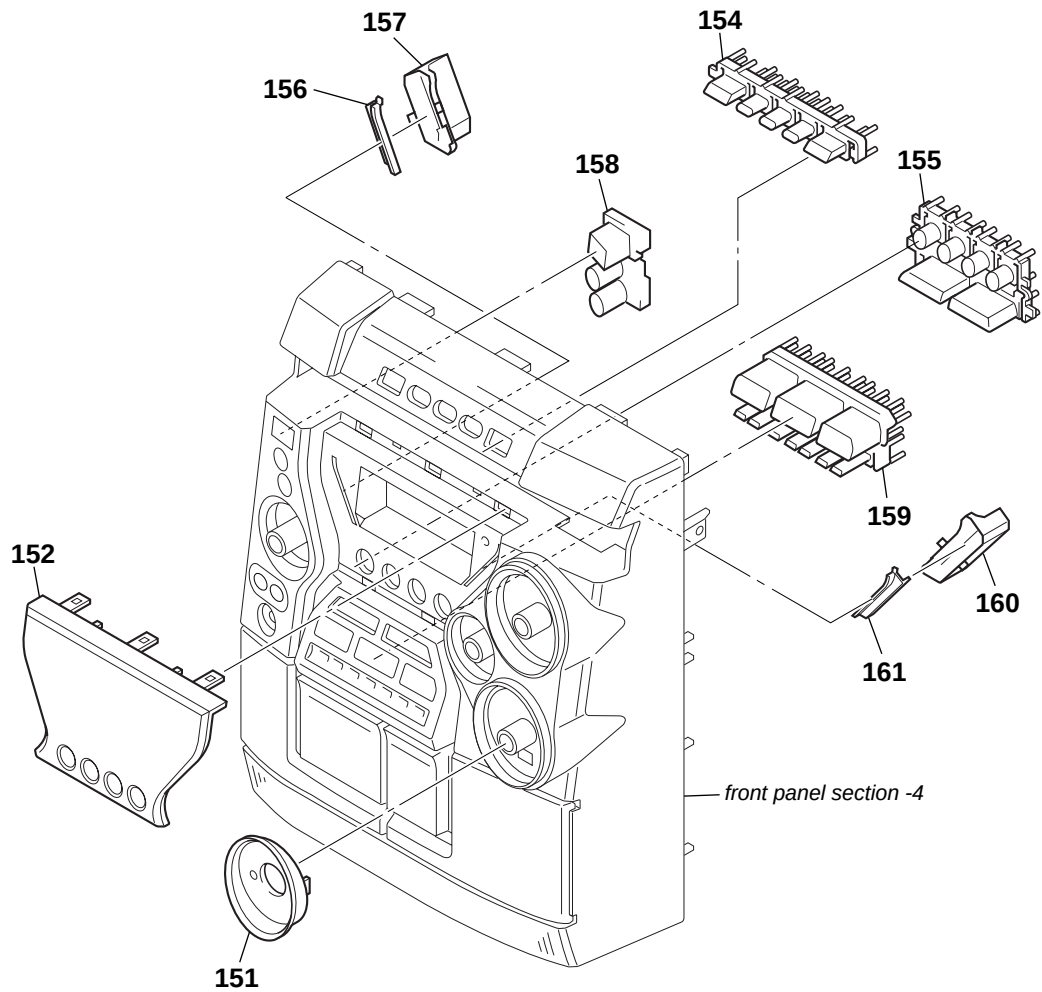
| Ref. No. | Part No.     | Description                  | Remark      | Ref. No. | Part No.     | Description                       | Remark |
|----------|--------------|------------------------------|-------------|----------|--------------|-----------------------------------|--------|
| 51       | 4-245-178-01 | PLATING, KNOB ROTARY (JOG)   |             | 55       | 1-796-486-51 | DECK, MECHANICAL (CWM43FR26) (TH) |        |
| 52       | 4-245-180-01 | PLATING, KNOB ROTARY (TRE)   |             | 57       |              | WIRE (FLAT TYPE) (13 CORE)        |        |
| 53       | 4-245-182-01 | PLATING, KNOB ROTARY (VOL)   |             | #1       | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S        |        |
| 54       | 4-245-176-01 | PLATING, KNOB ROTARY (BASS)  |             |          |              |                                   |        |
| 55       | 1-796-486-41 | DECK, MECHANICAL (CWM43FR16) | (EXCEPT TH) |          |              |                                   |        |

7-3. FRONT PANEL SECTION-2



| Ref. No. | Part No.     | Description                       | Remark | Ref. No. | Part No.     | Description                         | Remark |
|----------|--------------|-----------------------------------|--------|----------|--------------|-------------------------------------|--------|
| 101      | 1-689-694-11 | CD KEY BOARD                      |        | 108      |              | WIRE (FLAT TYPE) (3 CORE)           |        |
| 102      | 1-689-695-11 | HEADPHONE JACK BOARD              |        | 109      | A-4748-819-A | KEY-MIC BOARD, COMPLETE (TH)        |        |
| 103      | 3-229-336-01 | SCREW, +BVWH TAPPING              |        | 109      | A-4749-188-A | KEY-MIC BOARD, COMPLETE (EXCEPT TH) |        |
| 104      | 4-245-189-01 | REFLECTOR, REMOTE CONTROL         |        | 110      |              | WIRE (FLAT TYPE) (24 CORE)          |        |
| 105      | A-4748-808-A | PANEL BOARD, COMPLETE (TH)        |        | 111      | 4-245-194-01 | SHEET, FL                           |        |
| 105      | A-4749-176-A | PANEL BOARD, COMPLETE (EXCEPT TH) |        | #1       | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S          |        |
| 106      |              | WIRE (FLAT TYPE) (9 CORE)         |        |          |              |                                     |        |

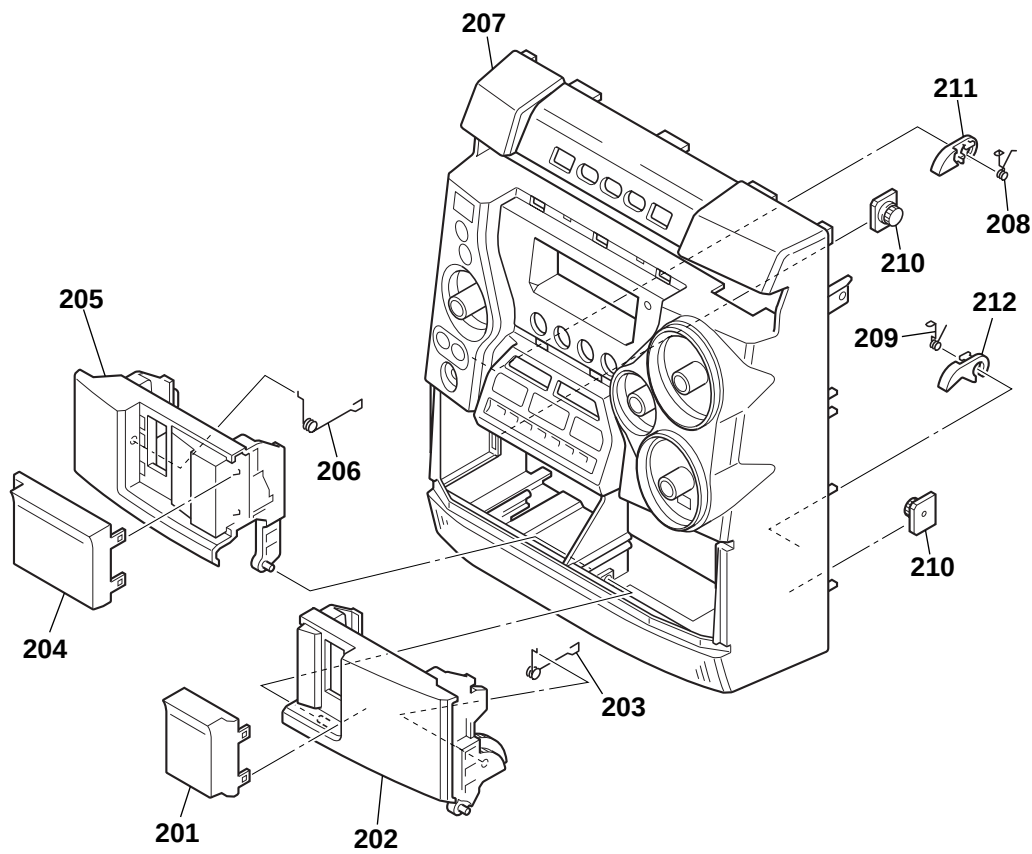
7-4. FRONT PANEL SECTION-3



| Ref. No. | Part No.     | Description                                             | Remark |
|----------|--------------|---------------------------------------------------------|--------|
| 151      | 4-245-193-01 | RING (BASS)                                             |        |
| 152      | 4-248-628-01 | WINDOW, DISPLAY                                         |        |
| 153      | 4-245-171-01 | KEY (CD) (DISC CHANGE. 1. 2. 3. ▲)                      |        |
| 154      | 4-245-172-11 | KEY (FUN) (TAPE A/B. TUNER BAND. VIDEO/AUX. DVD. ◀▶. ■) |        |
| 156      | 4-245-190-01 | REFLECTOR (BASS)                                        |        |
| 157      | 4-245-164-01 | GUIDE (BASS)                                            |        |

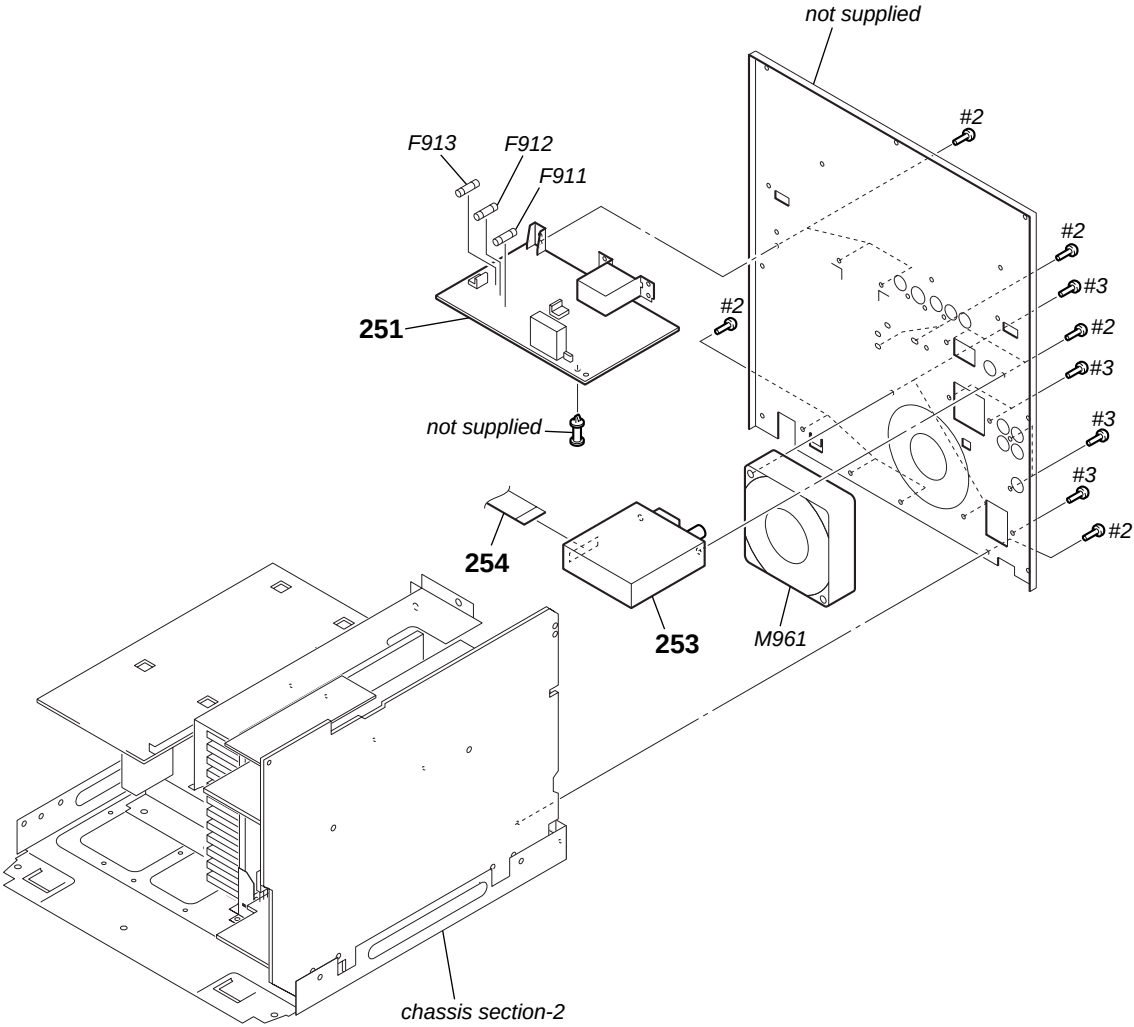
| Ref. No. | Part No.     | Description                                                                               | Remark |
|----------|--------------|-------------------------------------------------------------------------------------------|--------|
| 158      | X-4955-560-1 | KEY ASSY (POWER)                                                                          |        |
| 159      | 4-248-913-01 | KEY (OPE DVD) (◀◀. ■. ▶▶. SOUND FIELD. i-Bass. DISPLAY. -. +. SYNC DUB. ● REC/REC MUTING) |        |
| 160      | 4-245-165-01 | GUIDE (VOL)                                                                               |        |
| 161      | 4-245-192-01 | REFLECTOR (VOL)                                                                           |        |

7-5. FRONT PANEL SECTION-4



| Ref. No. | Part No.     | Description                  | Remark | Ref. No. | Part No.     | Description          | Remark |
|----------|--------------|------------------------------|--------|----------|--------------|----------------------|--------|
| 201      | 4-245-198-01 | WINDOW (2), CASSETTE         |        | 207      | 4-245-153-61 | CABINET, FRONT       |        |
| 202      | 4-245-160-11 | BOX (2), CASSETTE            |        | 208      | 4-231-836-01 | SPRING (HEART CAM-A) |        |
| 203      | 4-245-196-01 | SPRING (BOX CASS R), TORSION |        | 209      | 4-231-841-01 | SPRING (HEART CAM-B) |        |
| 204      | 4-245-197-01 | WINDOW (1), CASSETTE         |        | 210      | 4-224-104-41 | DAMPER               |        |
| 205      | 4-245-159-01 | BOX (1), CASSETTE            |        | 211      | 4-231-824-01 | CAM (A), HEART       |        |
| 206      | 4-245-195-01 | SPRING (BOX CASS L), TORSION |        | 212      | 4-231-825-01 | CAM (B), HEART       |        |

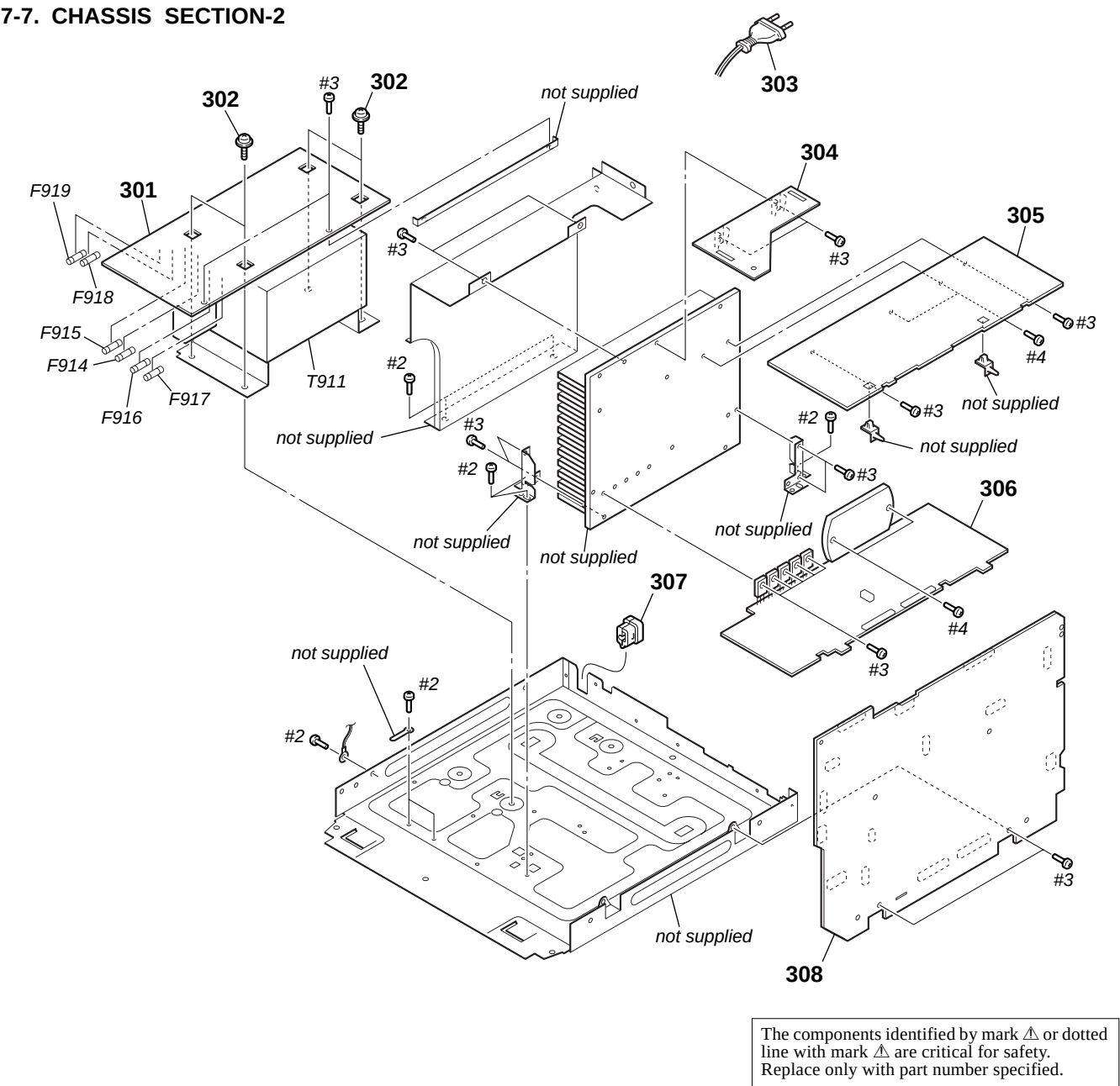
7-6. CHASSIS SECTION-1



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

| Ref. No. | Part No.     | Description                            | Remark | Ref. No.         | Part No.     | Description                           | Remark |
|----------|--------------|----------------------------------------|--------|------------------|--------------|---------------------------------------|--------|
| 251      | A-4748-815-A | SUB TRANS BOARD, COMPLETE (TH)         |        | $\triangle$ F911 | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V) |        |
| 251      | A-4749-191-A | SUB TRANS BOARD, COMPLETE (EXCEPT TH)  |        | $\triangle$ F912 | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V) |        |
| 253      | 1-693-615-21 | TUNER (FM/AM) (EXCEPT AEP)             |        | $\triangle$ F913 | 1-576-655-12 | FUSE, GLASS TUBE (DIA. 5) (T8AL/250V) |        |
| 253      | 1-693-617-11 | TUNER (AEP)                            |        | M961             | 1-763-072-11 | FAN, DC                               |        |
| 254      |              | WIRE (FLAT TYPE) (11CORE) (EXCEPT AEP) |        | #2               | 7-685-871-01 | SCREW +BVTT 3X6 (S)                   |        |
| 254      |              | WIRE (FLAT TYPE) (15CORE) (AEP)        |        | #3               | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 IT-3            |        |

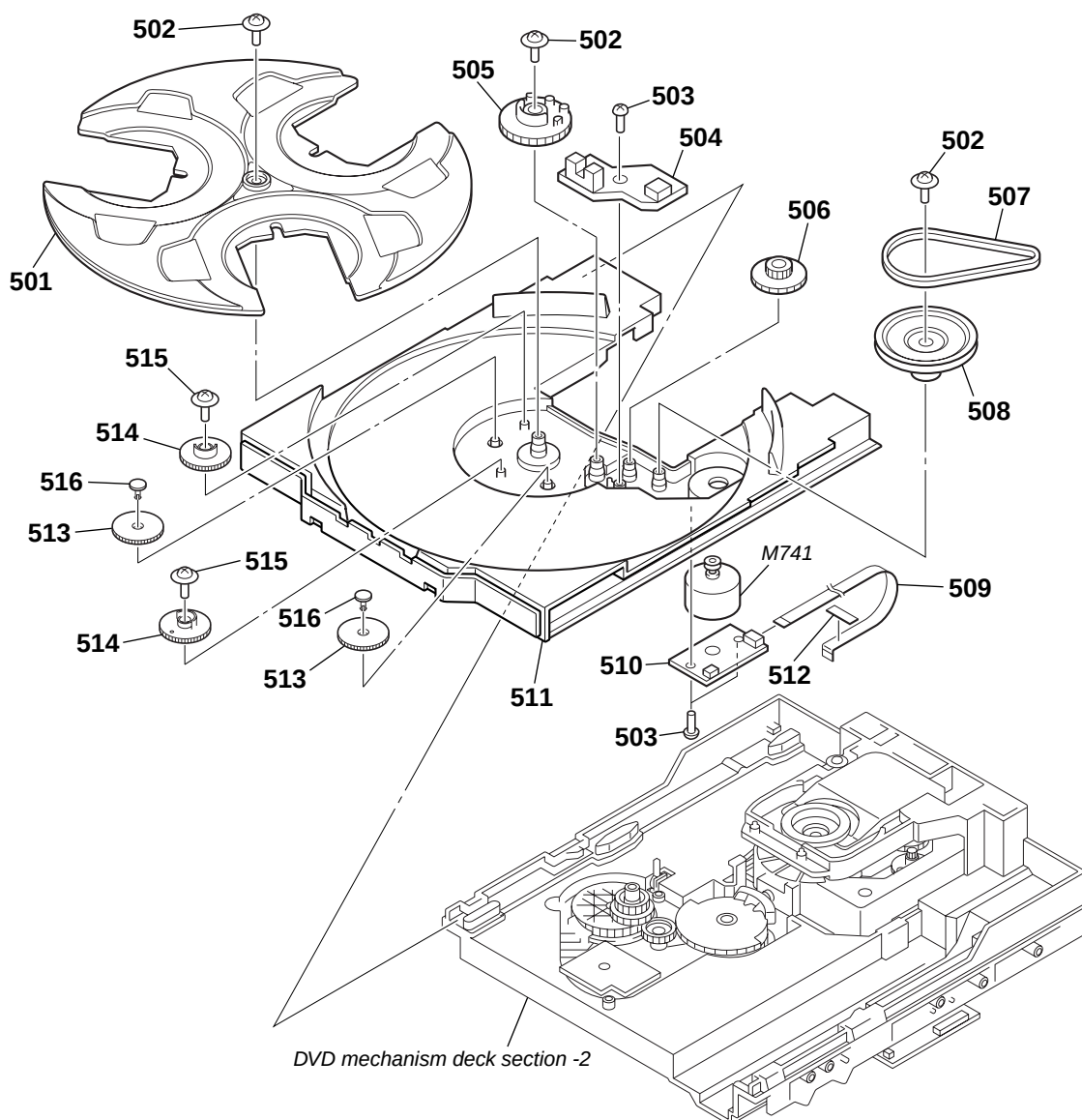
7-7. CHASSIS SECTION-2



| Ref. No. | Part No.     | Description                                | Remark |
|----------|--------------|--------------------------------------------|--------|
| 301      | A-4748-814-A | TRANS BOARD, COMPLETE (TH)                 |        |
| 301      | A-4749-190-A | TRANS BOARD, COMPLETE (EXCEPT TH)          |        |
| 302      | 4-242-527-01 | S-SCREW, ITC+4-8 R                         |        |
| Δ 303    | 1-690-608-11 | CORD, POWER (AEP, AUS)                     |        |
| Δ 303    | 1-775-787-11 | CORD, POWER (TH)                           |        |
| Δ 303    | 1-775-787-62 | CORD, POWER (E51, EA)                      |        |
| Δ 303    | 1-827-226-11 | CORD, POWER (E)                            |        |
| Δ 303    |              | CORD, POWER (SP, MY)                       |        |
| 304      | A-4748-800-A | I-BASS BOARD, COMPLETE (TH)                |        |
| 304      | A-4749-158-A | I-BASS BOARD, COMPLETE (EXCEPT TH)         |        |
| 305      | A-4748-811-A | SURROUND AMP BOARD, COMPLETE (TH)          |        |
| 305      | A-4749-179-A | SURROUND AMP BOARD, COMPLETE (EXCEPT TH)   |        |
| 306      | A-4748-807-A | FRONT AMP BOARD, COMPLETE (TH)             |        |
| 306      | A-4749-178-A | FRONT AMP BOARD, COMPLETE (EXCEPT AEP, TH) |        |
| 306      | A-4750-345-A | FRONT AMP BOARD, COMPLETE (AEP)            |        |
| 307      | 3-703-244-00 | BUSHING (2104), CORD (EXCEPT E)            |        |
| 307      | 3-703-571-11 | BUSHING (S) (4516), CORD (E)               |        |

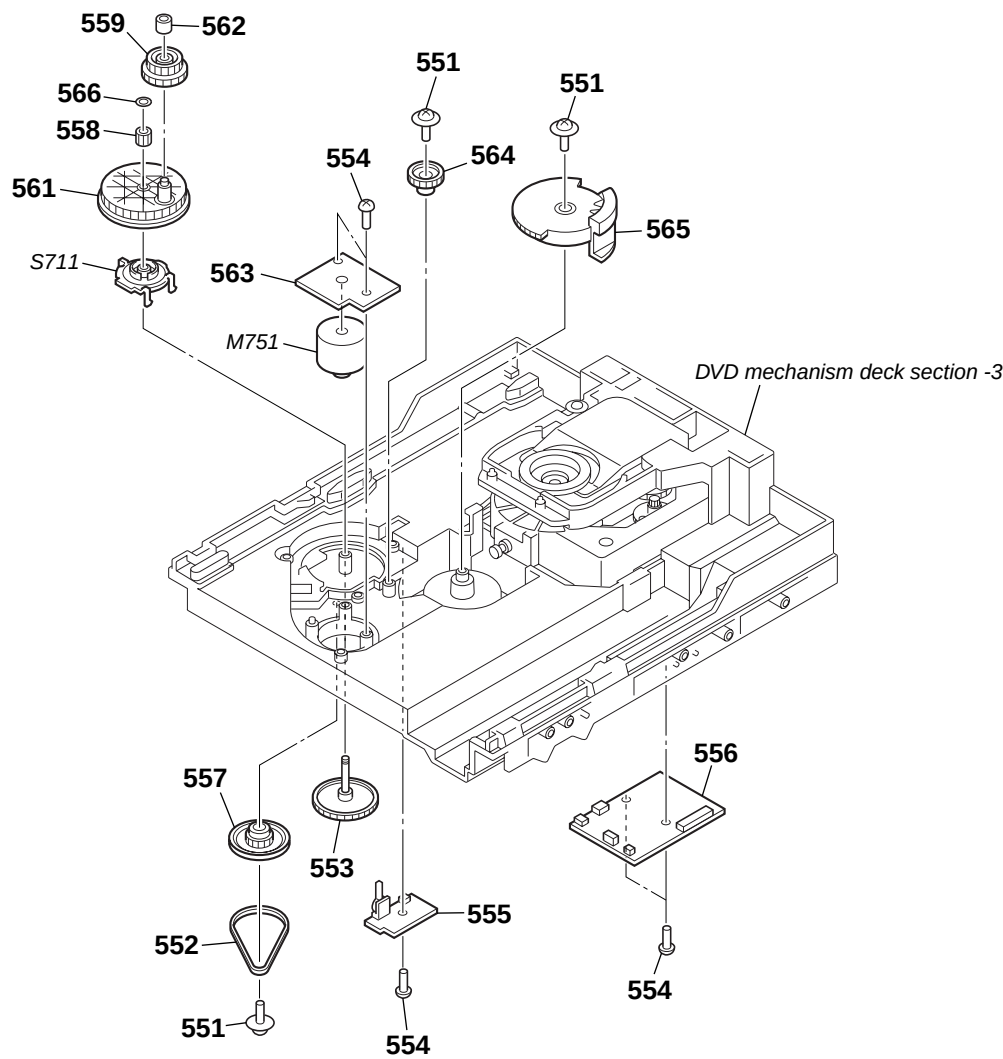
| Ref. No. | Part No.     | Description                             | Remark |
|----------|--------------|-----------------------------------------|--------|
| 308      | A-4748-801-A | MAIN BOARD, COMPLETE (TH)               |        |
| 308      | A-4749-175-A | MAIN BOARD, COMPLETE (SP, MY)           |        |
| 308      | A-4749-203-A | MAIN BOARD, COMPLETE (AUS)              |        |
| 308      | A-4749-271-A | MAIN BOARD, COMPLETE (EA)               |        |
| 308      | A-4749-273-A | MAIN BOARD, COMPLETE (E)                |        |
| 308      | A-4749-276-A | MAIN BOARD, COMPLETE (E51)              |        |
| 308      | A-4750-348-A | MAIN BOARD, COMPLETE (AEP)              |        |
| Δ F914   | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |        |
| Δ F915   | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |        |
| Δ F916   | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |        |
| Δ F917   | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |        |
| Δ F918   | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)   |        |
| Δ F919   | 1-533-471-11 | FUSE, GLASS TUBE (DIA. 5) (T4AL/250V)   |        |
| Δ T911   | 1-443-042-11 | TRANSFORMER, POWER (EXCEPT EA)          |        |
| Δ T911   | 1-443-043-11 | TRANSFORMER, POWER (EA)                 |        |
| #2       | 7-685-871-01 | SCREW +BVTT 3X6 (S)                     |        |
| #3       | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 IT-3              |        |
| #4       | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3             |        |

# 7-8. DVD MECHANISM DECK SECTION-1 (CDM74-DVBU23)



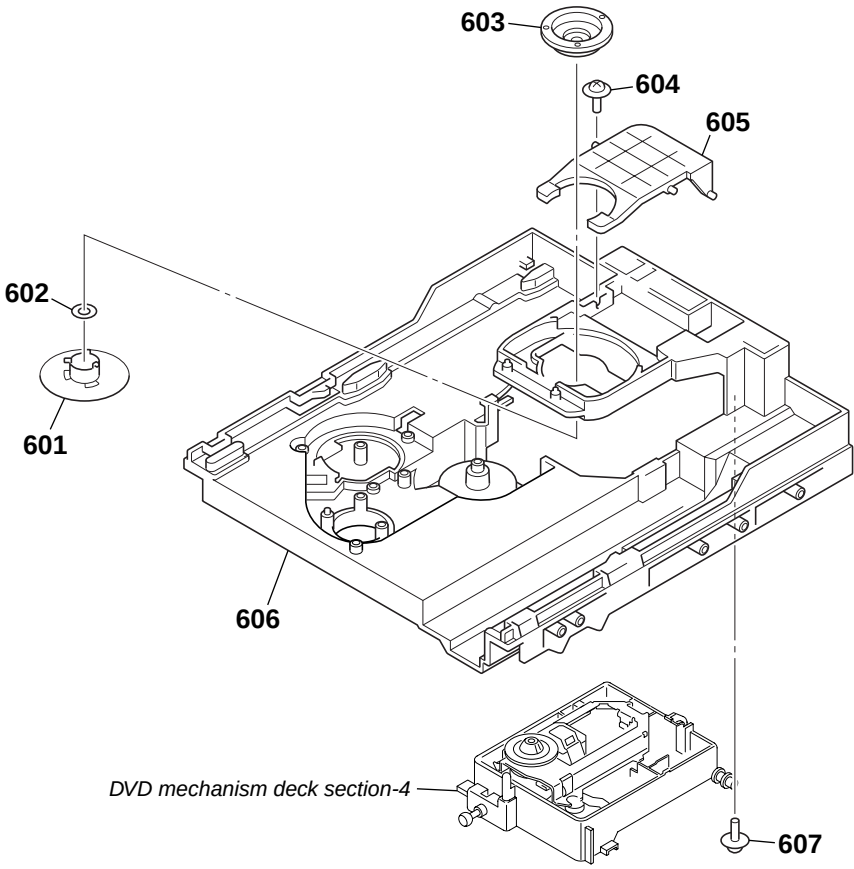
| Ref. No. | Part No.     | Description                   | Remark | Ref. No. | Part No.     | Description                   | Remark |
|----------|--------------|-------------------------------|--------|----------|--------------|-------------------------------|--------|
| 501      | 4-243-815-01 | TABLE (LOADING)               |        | 510      | 1-687-134-11 | MOTOR (TB) BOARD              |        |
| 502      | 4-218-252-61 | SCREW (+PTPWH M2.6), FLOATING |        | 511      | 4-243-816-01 | TRAY                          |        |
| 503      | 4-218-253-21 | SCREW (M2.6), +BTTP           |        | 512      | 3-231-598-01 | SHEET (BA)                    |        |
| 504      | 1-687-132-11 | SENSOR BOARD                  |        | 513      | 4-245-570-01 | GEAR (JOINT)                  |        |
| 505      | 4-243-819-01 | GEAR (GENEVA)                 |        | 514      | 4-245-571-02 | GEAR (STOPPER)                |        |
| 506      | 4-243-820-01 | GEAR (TABLE)                  |        | 515      | 4-985-672-01 | SCREW (+PTPWH M2.6), FLOATING |        |
| 507      | 4-243-823-01 | BELT (TABLE)                  |        | 516      | 4-245-572-01 | BUSHING (GEAR)                |        |
| 508      | 4-243-821-01 | PULLEY (TABLE)                |        | M741     | A-4723-963-A | MOTOR ASSY, TABLE             |        |
| 509      | 1-776-182-11 | WIRE (FLAT TYPE) (5 CORE)     |        |          |              |                               |        |

7-9. DVD MECHANISM DECK SECTION-2  
(CDM74-DVBU23)



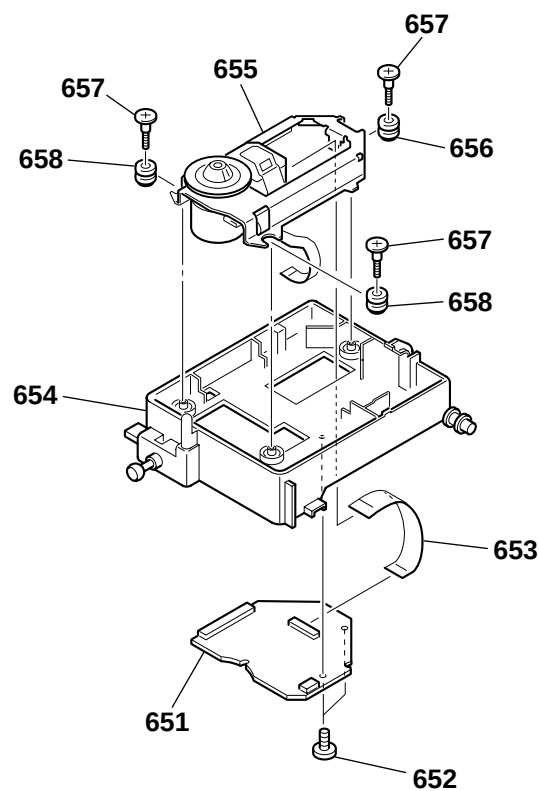
| Ref. No. | Part No.     | Description                   | Remark | Ref. No. | Part No.     | Description                | Remark |
|----------|--------------|-------------------------------|--------|----------|--------------|----------------------------|--------|
| 551      | 4-218-252-61 | SCREW (+PTPWH M2.6), FLOATING |        | 561      | 4-244-108-01 | GEAR, SWING                |        |
| 552      | 4-244-034-01 | BELT (LOADING)                |        | 562      | 4-224-608-01 | COLLAR, SWING              |        |
| 553      | 4-224-613-01 | GEAR (SHAFT)                  |        | 563      | 1-687-133-11 | MOTOR (LD) BOARD           |        |
| 554      | 4-218-253-31 | SCREW (M2.6), +BTTP           |        | 564      | 4-224-606-01 | GEAR (RV)                  |        |
| 555      | 1-687-669-11 | SW BOARD                      |        | 565      | 4-243-818-01 | GEAR (U/D)                 |        |
| 556      | 1-687-135-11 | DRIVER BOARD                  |        | 566      | 3-016-533-01 | WASHER (FR), STOPPER       |        |
| 557      | 4-225-844-01 | GEAR (LOADING A)              |        | M751     | A-4737-553-A | MOTOR ASSY, LOADING        |        |
| 558      | 4-224-611-01 | GEAR (LOADING B)              |        | S711     | 1-477-680-11 | ENCODER, ROTARY            |        |
| 559      | 4-224-609-01 | GEAR (LOADING C)              |        |          |              | (DISC TRAY ADDRESS DETECT) |        |

7-10. DVD MECHANISM DECK SECTION-3  
(CDM74-DVBU23)



| Ref. No. | Part No.     | Description                   | Remark | Ref. No. | Part No.     | Description                                  | Remark |
|----------|--------------|-------------------------------|--------|----------|--------------|----------------------------------------------|--------|
| 601      | X-4954-450-1 | PULLEY (240) ASSY             |        | 606      | 4-243-817-11 | CHASSIS                                      |        |
| 602      | 3-053-844-01 | YOKE                          |        | 607      | 4-218-252-51 | SCREW (+PTPWH M2.6), FLOATING<br>(EXCEPT TH) |        |
| 603      | 4-233-594-01 | PULLEY (B) (DVD), CHUCKING    |        | 607      | 4-218-252-61 | SCREW (+PTPWH M2.6), FLOATING (TH)           |        |
| 604      | 4-218-252-61 | SCREW (+PTPWH M2.6), FLOATING |        |          |              |                                              |        |
| 605      | 4-243-822-01 | LEVER (LIFTER)                |        |          |              |                                              |        |

7-11. DVD MECHANISM DECK SECTION-4  
(CDM74-DVBU23)



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

| Ref. No. | Part No.     | Description                    | Remark | Ref. No.        | Part No.     | Description                   | Remark |
|----------|--------------|--------------------------------|--------|-----------------|--------------|-------------------------------|--------|
| 651      | A-4728-690-A | RF BOARD, COMPLETE             |        | $\triangle$ 655 | 1-477-263-11 | OPTICAL TRAVERSE UNIT (DBU-1) |        |
| 652      | 4-218-253-11 | SCREW (M2.6), +BTTP            |        | 656             | 3-053-847-31 | INSULATOR                     |        |
| 653      | 1-824-106-12 | CABLE, FLEXIBLE FLAT (24 CORE) |        | 657             | 4-981-923-01 | SCREW (M), STEP               |        |
| 654      | X-4955-538-1 | HOLDER (DBU) ASSY              |        | 658             | 4-251-328-01 | INSULATOR (HRC)               |        |

## SECTION 8 ELECTRICAL PARTS LIST

CD KEY

DRIVER

FRONT AMP

## NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA. . :  $\mu$ A. .      uPA. . :  $\mu$ PA. .  
uPB. . :  $\mu$ PB. .    uPC. . :  $\mu$ PC. .  
uPD. . :  $\mu$ PD. .
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

When indicating parts by reference number, please include the board.

## • Abbreviation

AUS : Australian model

E51 : Chilean and Peruvian models

EA : Saudi Arabia model

MY : Malaysia model

SP : Singapore model

TH : Thai model

| Ref. No. | Part No.     | Description                                    | Remark |      |       |  | Ref. No.     | Part No.                                      | Description    | Remark    |     |      |              |
|----------|--------------|------------------------------------------------|--------|------|-------|--|--------------|-----------------------------------------------|----------------|-----------|-----|------|--------------|
|          | 1-689-694-11 | CD KEY BOARD<br>*****                          |        |      |       |  |              |                                               | < IC >         |           |     |      |              |
|          |              | < CONNECTOR >                                  |        |      |       |  | IC701        | 8-759-598-69                                  | IC BA6956AN    |           |     |      |              |
|          |              |                                                |        |      |       |  | IC712        | 8-759-598-69                                  | IC BA6956AN    |           |     |      |              |
| * CN302  | 1-695-364-31 | PIN, CONNECTOR (PC BOARD) 3P                   |        |      |       |  |              |                                               | < TRANSISTOR > |           |     |      |              |
|          |              | < RESISTOR >                                   |        |      |       |  | Q731         | 8-729-029-66                                  | TRANSISTOR     | DTC114ESA |     |      |              |
| R15      | 1-216-823-11 | METAL CHIP                                     | 1.5K   | 5%   | 1/10W |  |              |                                               | < RESISTOR >   |           |     |      |              |
| R16      | 1-216-825-11 | METAL CHIP                                     | 2.2K   | 5%   | 1/10W |  | R701         | 1-249-413-11                                  | CARBON         | 470       | 5%  | 1/4W |              |
| R17      | 1-216-827-11 | METAL CHIP                                     | 3.3K   | 5%   | 1/10W |  | R702         | 1-247-807-31                                  | CARBON         | 100       | 5%  | 1/4W |              |
| R18      | 1-216-829-11 | METAL CHIP                                     | 4.7K   | 5%   | 1/10W |  | R711         | 1-249-417-11                                  | CARBON         | 1K        | 5%  | 1/4W |              |
| R19      | 1-218-867-11 | METAL CHIP                                     | 6.8K   | 0.5% | 1/10W |  | R712         | 1-249-425-11                                  | CARBON         | 4.7K      | 5%  | 1/4W |              |
|          |              | < SWITCH >                                     |        |      |       |  | R713         | 1-249-433-11                                  | CARBON         | 22K       | 5%  | 1/4W |              |
| S15      | 1-771-410-21 | SWITCH, TACTILE (DISC CHANGE/DISC SKIP)        |        |      |       |  | R721         | 1-249-425-11                                  | CARBON         | 4.7K      | 5%  | 1/4W |              |
| S16      | 1-771-410-21 | SWITCH, TACTILE (DISC DIRECT PLAY 1)           |        |      |       |  | R722         | 1-249-425-11                                  | CARBON         | 4.7K      | 5%  | 1/4W |              |
| S17      | 1-771-410-21 | SWITCH, TACTILE (DISC DIRECT PLAY 2)           |        |      |       |  | R723         | 1-249-425-11                                  | CARBON         | 4.7K      | 5%  | 1/4W |              |
| S18      | 1-771-410-21 | SWITCH, TACTILE (DISC DIRECT PLAY 3)           |        |      |       |  | R731         | 1-247-807-31                                  | CARBON         | 100       | 5%  | 1/4W |              |
| S19      | 1-771-410-21 | SWITCH, TACTILE (OPEN/CLOSE $\blacktriangle$ ) |        |      |       |  | R732         | 1-249-429-11                                  | CARBON         | 10K       | 5%  | 1/4W |              |
| *****    |              |                                                |        |      |       |  |              |                                               |                |           |     |      |              |
|          | 1-687-135-11 | DRIVER BOARD<br>*****                          |        |      |       |  | R733         | 1-249-417-11                                  | CARBON         | 1K        | 5%  | 1/4W |              |
|          |              | < CAPACITOR >                                  |        |      |       |  | R734         | 1-249-430-11                                  | CARBON         | 12K       | 5%  | 1/4W |              |
| C715     | 1-126-933-11 | ELECT                                          | 100uF  | 20%  | 16V   |  | R735         | 1-247-807-31                                  | CARBON         | 100       | 5%  | 1/4W |              |
| C731     | 1-126-964-11 | ELECT                                          | 10uF   | 20%  | 50V   |  | R751         | 1-249-425-11                                  | CARBON         | 4.7K      | 5%  | 1/4W |              |
| C735     | 1-164-159-11 | CERAMIC                                        | 0.1uF  |      | 50V   |  | *****        |                                               |                |           |     |      |              |
| C736     | 1-164-159-11 | CERAMIC                                        | 0.1uF  |      | 50V   |  | A-4748-807-A | FRONT AMP BOARD, COMPLETE (TH)                |                |           |     |      |              |
| C737     | 1-164-159-11 | CERAMIC                                        | 0.1uF  |      | 50V   |  | A-4749-178-A | FRONT AMP BOARD, COMPLETE<br>(EXCEPT AEP, TH) |                |           |     |      |              |
|          |              |                                                |        |      |       |  | A-4750-345-A | FRONT AMP BOARD, COMPLETE (AEP)<br>*****      |                |           |     |      |              |
| C741     | 1-162-306-11 | CERAMIC                                        | 0.01uF | 20%  | 16V   |  |              |                                               | < CAPACITOR >  |           |     |      |              |
| C751     | 1-162-306-11 | CERAMIC                                        | 0.01uF | 20%  | 16V   |  | C201         | 1-126-964-11                                  | ELECT          | 10uF      | 20% | 50V  |              |
| C752     | 1-164-159-11 | CERAMIC                                        | 0.1uF  |      | 50V   |  | C202         | 1-162-294-31                                  | CERAMIC        | 0.001uF   | 10% | 50V  |              |
|          |              | < CONNECTOR >                                  |        |      |       |  | C203         | 1-102-282-31                                  | CERAMIC        | 100PF     | 10% | 50V  |              |
| CN701    | 1-785-338-11 | PIN, CONNECTOR (LIGHT ANGLE) 12P               |        |      |       |  |              |                                               |                |           |     |      |              |
| CN702    | 1-784-766-11 | CONNECTOR, FFC 5P                              |        |      |       |  | C203         | 1-162-286-31                                  | CERAMIC        | 220PF     | 10% | 50V  | (AEP)        |
| * CN703  | 1-564-720-11 | PIN, CONNECTOR (SMALL TYPE) 4P                 |        |      |       |  |              |                                               |                |           |     |      | (EXCEPT AEP) |
| CN704    | 1-785-328-11 | PIN, CONNECTOR (LIGHT ANGRE) 2P                |        |      |       |  | C204         | 1-126-967-11                                  | ELECT          | 47uF      | 20% | 50V  |              |
|          |              | < DIODE >                                      |        |      |       |  | C206         | 1-136-495-11                                  | FILM           | 0.068uF   | 5%  | 50V  |              |
| D701     | 8-719-947-16 | DIODE MTZJ-T-72-5.1A                           |        |      |       |  | C207         | 1-136-495-11                                  | FILM           | 0.068uF   | 5%  | 50V  |              |
| D711     | 8-719-983-66 | DIODE MTZJ-T-72-3.6B                           |        |      |       |  | C208         | 1-128-551-11                                  | ELECT          | 22uF      | 20% | 63V  |              |
|          |              |                                                |        |      |       |  | C216         | 1-162-306-11                                  | CERAMIC        | 0.01uF    | 20% | 16V  |              |
|          |              |                                                |        |      |       |  | C221         | 1-128-555-91                                  | ELECT          | 470uF     | 20% | 63V  |              |
|          |              |                                                |        |      |       |  | C231         | 1-126-964-11                                  | ELECT          | 10uF      | 20% | 50V  |              |

## FRONT AMP

| Ref. No. | Part No.     | Description                   |         |     |              | Remark | Ref. No. | Part No.       | Description    |                |     |      |              | Remark       |
|----------|--------------|-------------------------------|---------|-----|--------------|--------|----------|----------------|----------------|----------------|-----|------|--------------|--------------|
| C232     | 1-104-665-11 | ELECT                         | 100uF   | 20% | 25V          |        |          | < COIL >       |                |                |     |      |              |              |
| C233     | 1-126-961-11 | ELECT                         | 2.2uF   | 20% | 50V          |        |          |                |                |                |     |      |              |              |
| C234     | 1-104-665-11 | ELECT                         | 100uF   | 20% | 25V          |        | L281     | 1-420-872-52   | COIL, AIR-CORE |                |     |      |              |              |
| C235     | 1-164-159-11 | CERAMIC                       | 0.1uF   |     | 50V          |        | L282     | 1-420-872-52   | COIL, AIR-CORE |                |     |      |              |              |
| C251     | 1-126-964-11 | ELECT                         | 10uF    | 20% | 50V          |        |          | < TRANSISTOR > |                |                |     |      |              |              |
| C252     | 1-162-294-31 | CERAMIC                       | 0.001uF | 10% | 50V          |        |          |                |                |                |     |      |              |              |
| C253     | 1-162-282-31 | CERAMIC                       | 100PF   | 10% | 50V          |        | Q201     | 8-729-140-84   | TRANSISTOR     | 2SC1841-PAFAEA |     |      |              |              |
|          |              |                               |         |     | (AEP)        |        | Q216     | 8-729-140-84   | TRANSISTOR     | 2SC1841-PAFAEA |     |      |              |              |
| C253     | 1-162-286-31 | CERAMIC                       | 220PF   | 10% | 50V          |        | Q217     | 8-729-119-78   | TRANSISTOR     | 2SC2785-HFE    |     |      |              |              |
|          |              |                               |         |     | (EXCEPT AEP) |        | Q221     | 8-729-140-82   | TRANSISTOR     | 2SA988-PAFAEA  |     |      |              |              |
| C254     | 1-126-967-11 | ELECT                         | 47uF    | 20% | 50V          |        | Q222     | 8-729-140-84   | TRANSISTOR     | 2SC1841-PAFAEA |     |      |              |              |
| C256     | 1-136-495-11 | FILM                          | 0.068uF | 5%  | 50V          |        |          |                |                |                |     |      |              |              |
| C257     | 1-136-495-11 | FILM                          | 0.068uF | 5%  | 50V          |        | Q232     | 8-729-119-78   | TRANSISTOR     | 2SC2785-HFE    |     |      |              |              |
|          |              |                               |         |     |              |        | Q233     | 8-729-119-78   | TRANSISTOR     | 2SC2785-HFE    |     |      |              |              |
| C258     | 1-128-551-11 | ELECT                         | 22uF    | 20% | 63V          |        | Q234     | 8-729-119-78   | TRANSISTOR     | 2SC2785-HFE    |     |      |              |              |
| C271     | 1-135-928-21 | ELECT                         | 2200uF  | 20% | 63V          |        | Q251     | 8-729-140-84   | TRANSISTOR     | 2SC1841-PAFAEA |     |      |              |              |
| C272     | 1-135-928-21 | ELECT                         | 2200uF  | 20% | 63V          |        | Q281     | 8-729-026-39   | TRANSISTOR     | 2SA933AS-QT    |     |      |              |              |
| C273     | 1-137-844-11 | ELECT                         | 2200uF  | 20% | 42V          |        |          |                |                |                |     |      |              |              |
| C274     | 1-137-844-11 | ELECT                         | 2200uF  | 20% | 42V          |        | Q282     | 8-729-140-84   | TRANSISTOR     | 2SC1841-PAFAEA |     |      |              |              |
| C281     | 1-136-165-00 | FILM                          | 0.1uF   | 5%  | 50V          |        |          | < RESISTOR >   |                |                |     |      |              |              |
| C282     | 1-136-165-00 | FILM                          | 0.1uF   | 5%  | 50V          |        |          |                |                |                |     |      |              |              |
| C283     | 1-136-165-00 | FILM                          | 0.1uF   | 5%  | 50V          |        | R201     | 1-249-417-11   | CARBON         | 1K             | 5%  | 1/4W |              |              |
| C284     | 1-136-165-00 | FILM                          | 0.1uF   | 5%  | 50V          |        | R202     | 1-249-437-11   | CARBON         | 47K            | 5%  | 1/4W |              |              |
| C285     | 1-162-306-11 | CERAMIC                       | 0.01uF  | 20% | 16V          |        | R203     | 1-249-408-11   | CARBON         | 180            | 5%  | 1/4W |              |              |
|          |              |                               |         |     |              |        |          |                |                |                |     |      |              | (AEP)        |
| C286     | 1-162-306-11 | CERAMIC                       | 0.01uF  | 20% | 16V          |        | R203     | 1-249-411-11   | CARBON         | 330            | 5%  | 1/4W |              |              |
| C921     | 1-126-956-91 | ELECT                         | 0.1uF   | 20% | 50V          |        |          |                |                |                |     |      |              | (EXCEPT AEP) |
| C922     | 1-126-767-11 | ELECT                         | 1000uF  | 20% | 16V          |        | R204     | 1-249-437-11   | CARBON         | 47K            | 5%  | 1/4W |              |              |
| C923     | 1-126-956-91 | ELECT                         | 0.1uF   | 20% | 50V          |        |          |                |                |                |     |      |              |              |
| C924     | 1-126-767-11 | ELECT                         | 1000uF  | 20% | 16V          |        | △ R205   | 1-208-602-11   | METAL          | 0.22           | 10% | 2W   | F            |              |
|          |              |                               |         |     |              |        | △ R206   | 1-208-602-11   | METAL          | 0.22           | 10% | 2W   | F            |              |
| C925     | 1-126-956-91 | ELECT                         | 0.1uF   | 20% | 50V          |        | R207     | 1-249-417-11   | CARBON         | 1K             | 5%  | 1/4W |              |              |
| C926     | 1-126-933-11 | ELECT                         | 100uF   | 20% | 16V          |        | R208     | 1-249-431-11   | CARBON         | 15K            | 5%  | 1/4W |              |              |
| C933     | 1-126-956-91 | ELECT                         | 0.1uF   | 20% | 50V          |        | R209     | 1-249-441-11   | CARBON         | 100K           | 5%  | 1/4W |              |              |
| C934     | 1-126-935-11 | ELECT                         | 470uF   | 20% | 16V          |        |          |                |                |                |     |      |              |              |
| C937     | 1-126-956-91 | ELECT                         | 0.1uF   | 20% | 50V          |        | R210     | 1-260-076-11   | CARBON         | 10             | 5%  | 1/2W |              |              |
|          |              |                               |         |     |              |        | △ R211   | 1-212-881-11   | FUSIBLE        | 100            | 5%  | 1/4W | F            |              |
| C938     | 1-126-935-11 | ELECT                         | 470uF   | 20% | 16V          |        | R214     | 1-249-406-11   | CARBON         | 120            | 5%  | 1/4W |              |              |
|          |              |                               |         |     |              |        | R215     | 1-249-433-11   | CARBON         | 22K            | 5%  | 1/4W |              |              |
|          |              | < CONNECTOR >                 |         |     |              |        | R216     | 1-249-441-11   | CARBON         | 100K           | 5%  | 1/4W |              |              |
| CN201    | 1-573-829-11 | CONNECTOR, BOARD TO BOARD 15P |         |     |              |        |          |                |                |                |     |      |              |              |
| CN206    | 1-573-829-11 | CONNECTOR, BOARD TO BOARD 15P |         |     |              |        |          |                |                |                |     |      |              |              |
|          |              | < DIODE >                     |         |     |              |        |          |                |                |                |     |      |              |              |
| D201     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
| D230     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
| D231     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
| D251     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
| D281     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
| D291     | 8-719-991-33 | DIODE 1SS133T-77              |         |     |              |        |          |                |                |                |     |      |              |              |
|          |              | < IC >                        |         |     |              |        |          |                |                |                |     |      |              |              |
| IC201    | 6-704-107-01 | IC STK403-100                 |         |     |              |        |          |                |                |                |     |      |              |              |
| IC203    | 6-703-610-01 | IC RT8H015C-T112-1            |         |     |              |        |          |                |                |                |     |      |              |              |
| IC921    | 8-759-518-68 | IC PQ12RF21                   |         |     |              |        |          |                |                |                |     |      |              |              |
| IC922    | 8-759-701-59 | IC NJM78M09FA                 |         |     |              |        |          |                |                |                |     |      |              |              |
| IC923    | 8-759-701-59 | IC NJM78M09FA                 |         |     |              |        |          |                |                |                |     |      |              |              |
| IC932    | 6-701-760-01 | IC uPC3504AHF                 |         |     |              |        |          |                |                |                |     |      |              |              |
| IC934    | 8-759-231-53 | IC TA7805S                    |         |     |              |        |          |                |                |                |     |      |              |              |
|          |              |                               |         |     |              |        |          |                |                |                |     |      |              | (AEP)        |
|          |              |                               |         |     |              |        | R253     | 1-249-411-11   | CARBON         | 330            | 5%  | 1/4W | (EXCEPT AEP) |              |
|          |              |                               |         |     |              |        |          |                |                |                |     |      |              |              |
|          |              |                               |         |     |              |        | R254     | 1-249-437-11   | CARBON         | 47K            | 5%  | 1/4W |              |              |

The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

## FRONT AMP

## HEADPHONE JACK

## I-BASS

| Ref. No.                  | Part No.     | Description                         | Remark            |
|---------------------------|--------------|-------------------------------------|-------------------|
| △ R255                    | 1-208-602-11 | METAL 0.22 10%                      | 2W F              |
| △ R256                    | 1-208-602-11 | METAL 0.22 10%                      | 2W F              |
| R257                      | 1-249-417-11 | CARBON 1K 5%                        | 1/4W              |
| R258                      | 1-249-431-11 | CARBON 15K 5%                       | 1/4W              |
| R259                      | 1-249-441-11 | CARBON 100K 5%                      | 1/4W              |
| R260                      | 1-260-076-11 | CARBON 10 5%                        | 1/2W              |
| △ R261                    | 1-212-881-11 | FUSIBLE 100 5%                      | 1/4W F            |
| R271                      | 1-249-441-11 | CARBON 100K 5%                      | 1/4W              |
| R272                      | 1-249-441-11 | CARBON 100K 5%                      | 1/4W              |
| R273                      | 1-249-441-11 | CARBON 100K 5%                      | 1/4W              |
| R274                      | 1-249-441-11 | CARBON 100K 5%                      | 1/4W              |
| △ R280                    | 1-215-892-11 | METAL OXIDE 1K 5%                   | 2W F              |
| R281                      | 1-260-076-11 | CARBON 10 5%                        | 1/2W              |
| R282                      | 1-260-076-11 | CARBON 10 5%                        | 1/2W              |
| R283                      | 1-260-076-11 | CARBON 10 5%                        | 1/2W              |
| R284                      | 1-260-076-11 | CARBON 10 5%                        | 1/2W              |
| R285                      | 1-249-437-11 | CARBON 47K 5%                       | 1/4W              |
| R286                      | 1-249-437-11 | CARBON 47K 5%                       | 1/4W              |
| R287                      | 1-249-429-11 | CARBON 10K 5%                       | 1/4W              |
| R288                      | 1-249-437-11 | CARBON 47K 5%                       | 1/4W              |
| R289                      | 1-249-429-11 | CARBON 10K 5%                       | 1/4W              |
| R290                      | 1-249-429-11 | CARBON 10K 5%                       | 1/4W              |
| R924                      | 1-249-417-11 | CARBON 1K 5%                        | 1/4W              |
| < RELAY >                 |              |                                     |                   |
| RY281                     | 1-515-920-11 | RELAY                               |                   |
| < THERMISTOR >            |              |                                     |                   |
| TH201                     | 1-807-796-11 | THERMISTOR                          |                   |
| < TERMINAL >              |              |                                     |                   |
| TM201                     | 1-694-677-12 | TERMINAL BOARD (4P) (FRONT SPEAKER) |                   |
| *****                     |              |                                     |                   |
|                           | 1-689-695-11 | HEADPHONE JACK BOARD                |                   |
| *****                     |              |                                     |                   |
| < CAPACITOR >             |              |                                     |                   |
| C505                      | 1-162-927-11 | CERAMIC CHIP 100PF 5%               | 50V (AEP)         |
| C506                      | 1-162-927-11 | CERAMIC CHIP 100PF 5%               | 50V (AEP)         |
| C507                      | 1-162-974-11 | CERAMIC CHIP 0.01uF                 | 50V               |
| < CONNECTOR >             |              |                                     |                   |
| * CN104                   | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P      |                   |
| * CN503                   | 1-564-719-11 | PIN, CONNECTOR (SMALL TYPE) 3P      |                   |
| < DIODE >                 |              |                                     |                   |
| D503                      | 8-719-988-61 | DIODE 1SS355TE-17                   |                   |
| D504                      | 8-719-988-61 | DIODE 1SS355TE-17                   |                   |
| < RESISTOR/FERRITE BEAD > |              |                                     |                   |
| FB503                     | 1-216-166-00 | RES-CHIP 47 5%                      | 1/8W (EXCEPT AEP) |
| FB503                     | 1-500-264-21 | BEAD, FERRITE (CHIP) (3216) (AEP)   |                   |
| FB504                     | 1-216-166-00 | RES-CHIP 47 5%                      | 1/8W (EXCEPT AEP) |

| Ref. No.       | Part No.                           | Description                       | Remark |
|----------------|------------------------------------|-----------------------------------|--------|
| FB504          | 1-500-264-21                       | BEAD, FERRITE (CHIP) (3216) (AEP) |        |
| < JACK >       |                                    |                                   |        |
| J221           | 1-793-829-11                       | JACK, HEADPHONE (PHONES)          |        |
| *****          |                                    |                                   |        |
| A-4748-800-A   | I-BASS BOARD, COMPLETE (TH)        |                                   |        |
| A-4749-158-A   | I-BASS BOARD, COMPLETE (EXCEPT TH) |                                   |        |
| *****          |                                    |                                   |        |
| < CAPACITOR >  |                                    |                                   |        |
| C315           | 1-126-963-11                       | ELECT 4.7uF 20%                   | 50V    |
| C316           | 1-126-963-11                       | ELECT 4.7uF 20%                   | 50V    |
| C329           | 1-126-963-11                       | ELECT 4.7uF 20%                   | 50V    |
| C330           | 1-126-963-11                       | ELECT 4.7uF 20%                   | 50V    |
| C340           | 1-126-947-11                       | ELECT 47uF 20%                    | 35V    |
| C341           | 1-126-947-11                       | ELECT 47uF 20%                    | 35V    |
| C367           | 1-136-169-00                       | FILM 0.22uF 5%                    | 50V    |
| C382           | 1-162-967-11                       | CERAMIC CHIP 0.0033uF 10%         | 50V    |
| C383           | 1-162-967-11                       | CERAMIC CHIP 0.0033uF 10%         | 50V    |
| C384           | 1-164-373-11                       | CERAMIC CHIP 0.033uF              | 25V    |
| C385           | 1-164-373-11                       | CERAMIC CHIP 0.033uF              | 25V    |
| C396           | 1-136-169-00                       | FILM 0.22uF 5%                    | 50V    |
| C400           | 1-128-551-11                       | ELECT 22uF 20%                    | 63V    |
| C491           | 1-164-245-11                       | CERAMIC CHIP 0.015uF 10%          | 25V    |
| C492           | 1-126-960-11                       | ELECT 1uF 20%                     | 50V    |
| < IC >         |                                    |                                   |        |
| IC303          | 6-704-074-01                       | IC NJM2156M (TE2)                 |        |
| < TRANSISTOR > |                                    |                                   |        |
| Q314           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q315           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q316           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q317           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q318           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q319           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q320           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| Q323           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q327           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q328           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q329           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q330           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q331           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q332           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q333           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q491           | 8-729-120-28                       | TRANSISTOR 2SC1623-L5L6           |        |
| Q492           | 8-729-045-62                       | FET 2SK2158-T2B                   |        |
| < RESISTOR >   |                                    |                                   |        |
| R300           | 1-216-829-11                       | METAL CHIP 4.7K 5%                | 1/10W  |
| R327           | 1-216-833-11                       | METAL CHIP 10K 5%                 | 1/10W  |
| R328           | 1-216-833-11                       | METAL CHIP 10K 5%                 | 1/10W  |
| R329           | 1-216-833-11                       | METAL CHIP 10K 5%                 | 1/10W  |
| R330           | 1-216-833-11                       | METAL CHIP 10K 5%                 | 1/10W  |
| R331           | 1-216-823-11                       | METAL CHIP 1.5K 5%                | 1/10W  |
| R332           | 1-216-835-11                       | METAL CHIP 15K 5%                 | 1/10W  |
| R333           | 1-216-833-11                       | METAL CHIP 10K 5%                 | 1/10W  |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

I-BASS

KEY-MIC

| Ref. No.                                         | Part No.     | Description  | Remark   |     |       |
|--------------------------------------------------|--------------|--------------|----------|-----|-------|
| R334                                             | 1-216-832-11 | METAL CHIP   | 8.2K     | 5%  | 1/10W |
| R335                                             | 1-216-842-11 | METAL CHIP   | 56K      | 5%  | 1/10W |
| R336                                             | 1-216-836-11 | METAL CHIP   | 18K      | 5%  | 1/10W |
| R337                                             | 1-216-823-11 | METAL CHIP   | 1.5K     | 5%  | 1/10W |
| R338                                             | 1-216-829-11 | METAL CHIP   | 4.7K     | 5%  | 1/10W |
| R339                                             | 1-216-821-11 | METAL CHIP   | 1K       | 5%  | 1/10W |
| R340                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R347                                             | 1-216-829-11 | METAL CHIP   | 4.7K     | 5%  | 1/10W |
| R366                                             | 1-216-813-11 | METAL CHIP   | 220      | 5%  | 1/10W |
| R367                                             | 1-216-829-11 | METAL CHIP   | 4.7K     | 5%  | 1/10W |
| R370                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R375                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R377                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R378                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R379                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R380                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R381                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R382                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R383                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R384                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R385                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R386                                             | 1-216-833-11 | METAL CHIP   | 10K      | 5%  | 1/10W |
| R403                                             | 1-216-823-11 | METAL CHIP   | 1.5K     | 5%  | 1/10W |
| R467                                             | 1-216-823-11 | METAL CHIP   | 1.5K     | 5%  | 1/10W |
| R468                                             | 1-216-835-11 | METAL CHIP   | 15K      | 5%  | 1/10W |
| R479                                             | 1-216-841-11 | METAL CHIP   | 47K      | 5%  | 1/10W |
| R491                                             | 1-216-849-11 | METAL CHIP   | 220K     | 5%  | 1/10W |
| R492                                             | 1-216-849-11 | METAL CHIP   | 220K     | 5%  | 1/10W |
| R493                                             | 1-216-845-11 | METAL CHIP   | 100K     | 5%  | 1/10W |
| R494                                             | 1-216-849-11 | METAL CHIP   | 220K     | 5%  | 1/10W |
| R495                                             | 1-216-837-11 | METAL CHIP   | 22K      | 5%  | 1/10W |
| *****                                            |              |              |          |     |       |
| A-4748-819-A KEY-MIC BOARD, COMPLETE (TH)        |              |              |          |     |       |
| A-4749-188-A KEY-MIC BOARD, COMPLETE (EXCEPT TH) |              |              |          |     |       |
| *****                                            |              |              |          |     |       |
| < CAPACITOR >                                    |              |              |          |     |       |
| C401                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C402                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C403                                             | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V   |
| C404                                             | 1-115-868-11 | ELECT        | 0.22uF   | 20% | 50V   |
| C405                                             | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V   |
| C406                                             | 1-126-934-11 | ELECT        | 220uF    | 20% | 16V   |
| C407                                             | 1-162-926-11 | CERAMIC CHIP | 82PF     | 5%  | 50V   |
| C408                                             | 1-115-867-11 | ELECT        | 0.1uF    | 20% | 50V   |
| C409                                             | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V   |
| C410                                             | 1-126-796-11 | ELECT        | 22uF     | 20% | 50V   |
| C411                                             | 1-115-414-11 | CERAMIC CHIP | 820PF    | 5%  | 25V   |
| C412                                             | 1-115-871-11 | ELECT        | 1uF      | 20% | 50V   |
| C420                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C421                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C422                                             | 1-164-473-11 | CERAMIC CHIP | 820PF    | 5%  | 50V   |
| C423                                             | 1-126-947-11 | ELECT        | 47uF     | 20% | 35V   |
| C424                                             | 1-162-967-11 | CERAMIC CHIP | 0.0033uF | 10% | 50V   |
| C425                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C426                                             | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V   |
| C427                                             | 1-164-473-11 | CERAMIC CHIP | 820PF    | 5%  | 50V   |

| Ref. No.         | Part No.     | Description                       | Remark         |      |     |
|------------------|--------------|-----------------------------------|----------------|------|-----|
| C428             | 1-162-967-11 | CERAMIC CHIP                      | 0.0033uF       | 10%  | 50V |
| C429             | 1-164-156-11 | CERAMIC CHIP                      | 0.1uF          |      | 25V |
| C430             | 1-164-217-11 | CERAMIC CHIP                      | 150PF          | 5%   | 50V |
| C431             | 1-164-156-11 | CERAMIC CHIP                      | 0.1uF          |      | 25V |
| C432             | 1-164-217-11 | CERAMIC CHIP                      | 150PF          | 5%   | 50V |
| C434             | 1-115-867-11 | ELECT                             | 0.1uF          | 20%  | 50V |
| C436             | 1-164-156-11 | CERAMIC CHIP                      | 0.1uF          |      | 25V |
| C437             | 1-104-665-11 | ELECT                             | 100uF          | 20%  | 25V |
| C439             | 1-164-156-11 | CERAMIC CHIP                      | 0.1uF          |      | 25V |
| C440             | 1-126-962-11 | ELECT                             | 3.3uF          | 20%  | 50V |
| C441             | 1-164-156-11 | CERAMIC CHIP                      | 0.1uF          |      | 25V |
| C801             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| C802             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| C803             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| C804             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| C805             | 1-128-821-11 | CERAMIC                           | 1000PF         | 5%   | 50V |
| C806             | 1-128-821-11 | CERAMIC                           | 1000PF         | 5%   | 50V |
| C807             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| C808             | 1-162-964-11 | CERAMIC CHIP                      | 0.001uF        | 10%  | 50V |
| < CONNECTOR >    |              |                                   |                |      |     |
| * CN107          | 1-784-746-11 | CONNECTOR, FFC 24P                |                |      |     |
| CN301            | 1-784-725-11 | CONNECTOR, FFC 3P                 |                |      |     |
| < DIODE >        |              |                                   |                |      |     |
| D191             | 8-719-988-61 | DIODE 1SS355TE-17                 |                |      |     |
| D401             | 8-719-988-61 | DIODE 1SS355TE-17                 |                |      |     |
| D403             | 8-719-069-55 | DIODE UDZSTE-175.6B               |                |      |     |
| < FERRITE BEAD > |              |                                   |                |      |     |
| FB401            | 1-414-760-21 | FERRITE, EMI (SMD) (1608)         |                |      |     |
| < IC >           |              |                                   |                |      |     |
| IC401            | 8-759-710-97 | IC NJM4565M-D                     |                |      |     |
| IC402            | 6-702-896-01 | IC BU9262AFS                      |                |      |     |
| < JACK >         |              |                                   |                |      |     |
| J401             | 1-817-765-11 | JACK (LARGE TYPE) (MIC)           |                |      |     |
| < SHORT >        |              |                                   |                |      |     |
| JR401            | 1-216-296-00 | SHORT CHIP                        | 0              |      |     |
| JR402            | 1-216-864-11 | SHORT CHIP                        | 0              |      |     |
| JR403            | 1-216-864-11 | SHORT CHIP                        | 0              |      |     |
| JR404            | 1-216-864-11 | SHORT CHIP                        | 0              |      |     |
| < COIL >         |              |                                   |                |      |     |
| L401             | 1-469-186-51 | INDUCTOR, MICRO                   |                | 82uH |     |
| < LED >          |              |                                   |                |      |     |
| LED192           | 8-719-063-93 | LED SLR325VC-N-T32 (⏻ STANDBY/ON) |                |      |     |
| < TRANSISTOR >   |              |                                   |                |      |     |
| Q191             | 8-729-028-73 | TRANSISTOR                        | DTA114EUA-T106 |      |     |
| Q401             | 8-729-045-62 | FET                               | 2SK2158-T2B    |      |     |

## KEY-MIC

## MAIN

| Ref. No.     | Part No.     | Description |      |    |       | Remark | Ref. No. | Part No.     | Description                          |          |     |       | Remark                   |
|--------------|--------------|-------------|------|----|-------|--------|----------|--------------|--------------------------------------|----------|-----|-------|--------------------------|
| < RESISTOR > |              |             |      |    |       |        | R809     | 1-249-429-11 | CARBON                               | 10K      | 5%  | 1/4W  |                          |
|              |              |             |      |    |       |        | R810     | 1-249-429-11 | CARBON                               | 10K      | 5%  | 1/4W  |                          |
| R11          | 1-216-817-11 | METAL CHIP  | 470  | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R12          | 1-216-819-11 | METAL CHIP  | 680  | 5% | 1/10W |        | R811     | 1-249-393-11 | CARBON                               | 10       | 5%  | 1/4W  |                          |
| R13          | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        | R812     | 1-249-393-11 | CARBON                               | 10       | 5%  | 1/4W  |                          |
| R14          | 1-216-823-11 | METAL CHIP  | 1.5K | 5% | 1/10W |        | R813     | 1-216-833-11 | METAL CHIP                           | 10K      | 5%  | 1/10W |                          |
| R31          | 1-216-817-11 | METAL CHIP  | 470  | 5% | 1/10W |        | R814     | 1-216-833-11 | METAL CHIP                           | 10K      | 5%  | 1/10W |                          |
|              |              |             |      |    |       |        | R815     | 1-216-797-11 | METAL CHIP                           | 10       | 5%  | 1/10W |                          |
| R32          | 1-216-819-11 | METAL CHIP  | 680  | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R33          | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        | R816     | 1-216-797-11 | METAL CHIP                           | 10       | 5%  | 1/10W |                          |
| R34          | 1-216-823-11 | METAL CHIP  | 1.5K | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R35          | 1-216-823-11 | METAL CHIP  | 1.5K | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R36          | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R37          | 1-216-827-11 | METAL CHIP  | 3.3K | 5% | 1/10W |        | S1       | 1-771-410-21 | SWITCH, TACTILE (POWER)              |          |     |       |                          |
| R38          | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W |        | S2       | 1-771-410-21 | SWITCH, TACTILE (DISPLAY)            |          |     |       |                          |
| R51          | 1-216-817-11 | METAL CHIP  | 470  | 5% | 1/10W |        | S11      | 1-771-410-21 | SWITCH, TACTILE (TAPE A/B)           |          |     |       |                          |
| R52          | 1-216-819-11 | METAL CHIP  | 680  | 5% | 1/10W |        | S12      | 1-771-410-21 | SWITCH, TACTILE (TUNER, BAND)        |          |     |       |                          |
| R53          | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        | S13      | 1-771-410-21 | SWITCH, TACTILE (VIDEO/AUX)          |          |     |       |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R54          | 1-216-823-11 | METAL CHIP  | 1.5K | 5% | 1/10W |        | S14      | 1-771-410-21 | SWITCH, TACTILE (DVD)                |          |     |       |                          |
| R55          | 1-216-823-11 | METAL CHIP  | 1.5K | 5% | 1/10W |        | S31      | 1-771-410-21 | SWITCH, TACTILE (MODE)               |          |     |       |                          |
| R193         | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        | S32      | 1-771-410-21 | SWITCH, TACTILE (ENTER)              |          |     |       |                          |
| R195         | 1-216-813-11 | METAL CHIP  | 220  | 5% | 1/10W |        | S33      | 1-771-410-21 | SWITCH, TACTILE (SOUND FIELD)        |          |     |       |                          |
| R401         | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W |        | S34      | 1-771-410-21 | SWITCH, TACTILE (i-Bass)             |          |     |       |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R402         | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W |        | S35      | 1-771-410-21 | SWITCH, TACTILE (ALBUM -)            |          |     |       |                          |
| R403         | 1-216-849-11 | METAL CHIP  | 220K | 5% | 1/10W |        | S36      | 1-771-410-21 | SWITCH, TACTILE (ALBUM +)            |          |     |       |                          |
| R404         | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W |        | S37      | 1-771-410-21 | SWITCH, TACTILE (● REC, REC MUTING)  |          |     |       |                          |
| R405         | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W |        | S38      | 1-771-410-21 | SWITCH, TACTILE (SYNC DUB)           |          |     |       |                          |
| R406         | 1-216-850-11 | METAL CHIP  | 270K | 5% | 1/10W |        | S51      | 1-771-410-21 | SWITCH, TACTILE                      |          |     |       |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       | (DIR (TAPE B)/PRESET ◀▶) |
| R407         | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        | S52      | 1-771-410-21 | SWITCH, TACTILE (STOP/CLEAR ■)       |          |     |       |                          |
| R408         | 1-247-807-31 | CARBON      | 100  | 5% | 1/4W  |        | S53      | 1-771-410-21 | SWITCH, TACTILE (TUNING UP ▶▶)       |          |     |       |                          |
| R409         | 1-249-413-11 | CARBON      | 470  | 5% | 1/4W  |        | S54      | 1-771-410-21 | SWITCH, TACTILE (PAUSE/SET ■■)       |          |     |       |                          |
| R410         | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W |        | S55      | 1-771-410-21 | SWITCH, TACTILE (TUNING DOWN ◀◀)     |          |     |       |                          |
| R411         | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W |        | S801     | 1-786-396-11 | SWITCH, ROTARY (ENCODER) (VOLUME)    |          |     |       |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R412         | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W |        | S802     | 1-786-396-11 | SWITCH, ROTARY (ENCODER) (BASS)      |          |     |       |                          |
| R413         | 1-216-839-11 | METAL CHIP  | 33K  | 5% | 1/10W |        | S803     | 1-786-418-11 | SWITCH, ROTARY (ENCODER) (MULTI JOG) |          |     |       |                          |
| R414         | 1-216-797-11 | METAL CHIP  | 10   | 5% | 1/10W |        | S804     | 1-477-824-11 | ENCODER, ROTARY (TREBLE)             |          |     |       |                          |
| R420         | 1-216-180-00 | RES-CHIP    | 180  | 5% | 1/8W  |        |          |              |                                      |          |     |       |                          |
| R421         | 1-216-180-00 | RES-CHIP    | 180  | 5% | 1/8W  |        |          |              |                                      |          |     |       | < VARIABLE RESISTOR >    |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R423         | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W |        | VR401    | 1-227-502-11 | RES, VAR, CARBON                     | 10K      |     |       | (MIC MIXING)             |
| R424         | 1-216-846-11 | METAL CHIP  | 120K | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R425         | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W |        | *****    |              |                                      |          |     |       |                          |
| R426         | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R427         | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W |        |          | A-4748-801-A | MAIN BOARD, COMPLETE (TH)            |          |     |       |                          |
|              |              |             |      |    |       |        |          | A-4749-175-A | MAIN BOARD, COMPLETE (SP, MY)        |          |     |       |                          |
| R428         | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W |        |          | A-4749-203-A | MAIN BOARD, COMPLETE (AUS)           |          |     |       |                          |
| R429         | 1-216-864-11 | SHORT CHIP  | 0    |    |       |        |          | A-4749-271-A | MAIN BOARD, COMPLETE (EA)            |          |     |       |                          |
| R430         | 1-216-864-11 | SHORT CHIP  | 0    |    |       |        |          | A-4749-273-A | MAIN BOARD, COMPLETE (E)             |          |     |       |                          |
| R431         | 1-216-864-11 | SHORT CHIP  | 0    |    |       |        |          |              |                                      |          |     |       |                          |
| R432         | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W |        |          | A-4749-276-A | MAIN BOARD, COMPLETE (E51)           |          |     |       |                          |
|              |              |             |      |    |       |        |          | A-4750-348-A | MAIN BOARD, COMPLETE (AEP)           |          |     |       |                          |
| R435         | 1-216-857-11 | METAL CHIP  | 1M   | 5% | 1/10W |        |          | *****        |                                      |          |     |       |                          |
| R439         | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W |        |          |              |                                      |          |     |       |                          |
| R499         | 1-216-864-11 | SHORT CHIP  | 0    |    |       |        |          |              |                                      |          |     |       | < CAPACITOR >            |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R801         | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W |        | C102     | 1-126-382-11 | ELECT                                | 100uF    | 20% | 16V   |                          |
| R802         | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W |        | C104     | 1-126-961-11 | ELECT                                | 2.2uF    | 20% | 50V   |                          |
| R803         | 1-216-797-11 | METAL CHIP  | 10   | 5% | 1/10W |        | C106     | 1-115-872-11 | ELECT                                | 2.2uF    | 20% | 50V   |                          |
| R804         | 1-216-797-11 | METAL CHIP  | 10   | 5% | 1/10W |        | C109     | 1-164-227-11 | CERAMIC CHIP                         | 0.022uF  | 10% | 25V   |                          |
| R805         | 1-249-429-11 | CARBON      | 10K  | 5% | 1/4W  |        | C110     | 1-164-227-11 | CERAMIC CHIP                         | 0.022uF  | 10% | 25V   |                          |
|              |              |             |      |    |       |        |          |              |                                      |          |     |       |                          |
| R806         | 1-249-429-11 | CARBON      | 10K  | 5% | 1/4W  |        | C111     | 1-126-795-11 | ELECT                                | 10uF     | 20% | 50V   |                          |
| R807         | 1-216-797-11 | METAL CHIP  | 10   | 5% | 1/10W |        | C112     | 1-165-176-11 | CERAMIC CHIP                         | 0.047uF  | 10% | 16V   |                          |
| R808         | 1-216-797-11 | METAL CHIP  | 10   | 5% | 1/10W |        | C113     | 1-162-968-11 | CERAMIC CHIP                         | 0.0047uF | 10% | 50V   |                          |

## MAIN

| Ref. No. | Part No.     | Description  | Remark   |     |      | Ref. No. | Part No.     | Description  | Remark   |     |     |
|----------|--------------|--------------|----------|-----|------|----------|--------------|--------------|----------|-----|-----|
| C116     | 1-136-169-00 | FILM         | 0.22uF   | 5%  | 50V  | C314     | 1-115-467-11 | CERAMIC CHIP | 0.22uF   | 10% | 10V |
| C117     | 1-136-169-00 | FILM         | 0.22uF   | 5%  | 50V  | C315     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C119     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C320     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C120     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C321     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V |
| C123     | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V  | C322     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C125     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C323     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V |
| C126     | 1-136-169-00 | FILM         | 0.22uF   | 5%  | 50V  | C324     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C127     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C325     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C128     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C326     | 1-162-962-11 | CERAMIC CHIP | 470PF    | 10% | 50V |
| C129     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V  | C330     | 1-165-176-11 | CERAMIC CHIP | 0.047uF  | 10% | 16V |
| C130     | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V  | C331     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V |
| C131     | 1-165-176-11 | CERAMIC CHIP | 0.047uF  | 10% | 16V  | C332     | 1-115-467-11 | CERAMIC CHIP | 0.22uF   | 10% | 10V |
| C132     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C333     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V |
| C133     | 1-164-227-11 | CERAMIC CHIP | 0.022uF  | 10% | 25V  | C334     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C134     | 1-164-227-11 | CERAMIC CHIP | 0.022uF  | 10% | 25V  | C335     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C135     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V  | C337     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C136     | 1-216-864-11 | SHORT CHIP   | 0        |     |      | C338     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C137     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V  | C341     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V |
| C138     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V  | C342     | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V |
| C139     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V  | C343     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V |
| C140     | 1-136-169-00 | FILM         | 0.22uF   | 5%  | 50V  | C344     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V |
| C141     | 1-115-872-11 | ELECT        | 2.2uF    | 20% | 50V  | C345     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V |
| C142     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C347     | 1-164-360-11 | CERAMIC CHIP | 0.1uF    |     | 16V |
| C143     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C351     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C144     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C352     | 1-162-960-11 | CERAMIC CHIP | 220PF    | 10% | 50V |
| C145     | 1-110-518-91 | ELECT        | 10uF     | 20% | 100V | C353     | 1-162-960-11 | CERAMIC CHIP | 220PF    | 10% | 50V |
| C146     | 1-110-518-91 | ELECT        | 10uF     | 20% | 100V | C354     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C149     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C355     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V |
| C150     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C356     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V |
| C151     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C357     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C152     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C358     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V |
| C153     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C359     | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C154     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C360     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V |
| C155     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V  | C361     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V |
| C156     | 1-126-957-11 | ELECT        | 0.22uF   | 20% | 50V  | C363     | 1-115-467-11 | CERAMIC CHIP | 0.22uF   | 10% | 10V |
| C157     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C364     | 1-115-467-11 | CERAMIC CHIP | 0.22uF   | 10% | 10V |
| C159     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C601     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V |
| C160     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C602     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C169     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V  | C603     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C170     | 1-126-959-11 | ELECT        | 0.47uF   | 20% | 50V  | C604     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C176     | 1-126-795-11 | ELECT        | 10uF     | 20% | 50V  | C605     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V |
| C201     | 1-162-927-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  | C606     | 1-162-965-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V |
| C251     | 1-162-927-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  | C607     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C252     | 1-216-864-11 | SHORT CHIP   | 0        |     |      | C608     | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C301     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C609     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C302     | 1-162-960-11 | CERAMIC CHIP | 220PF    | 10% | 50V  | C610     | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C303     | 1-162-960-11 | CERAMIC CHIP | 220PF    | 10% | 50V  | C611     | 1-128-551-11 | ELECT        | 22uF     | 20% | 63V |
| C304     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C612     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C305     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C613     | 1-128-551-11 | ELECT        | 22uF     | 20% | 63V |
| C306     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C615     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V |
| C307     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C617     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C308     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  | C618     | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V |
| C309     | 1-162-966-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  | C619     | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V |
| C310     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C620     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
| C311     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V  | C621     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V |
| C312     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V  | C622     | 1-162-965-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V |
| C313     | 1-115-467-11 | CERAMIC CHIP | 0.22uF   | 10% | 10V  | C623     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |
|          |              |              |          |     |      | C624     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V |

| Ref. No. | Part No.     | Description  |          |     | Remark | Ref. No. | Part No.     | Description                        |  | Remark |
|----------|--------------|--------------|----------|-----|--------|----------|--------------|------------------------------------|--|--------|
| C625     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V    | C899     | 1-162-974-11 | CERAMIC CHIP 0.01uF                |  | 50V    |
| C626     | 1-126-947-11 | ELECT        | 47uF     | 20% | 35V    |          |              | < CONNECTOR >                      |  |        |
| C627     | 1-126-960-11 | ELECT        | 1uF      | 20% | 50V    | CN101    | 1-779-275-11 | CONNECTOR, FFC (LIF (NON-ZIF)) 7P  |  |        |
| C628     | 1-162-963-11 | CERAMIC CHIP | 680PF    | 10% | 50V    | CN102    | 1-568-830-11 | CONNECTOR, FFC 11P                 |  |        |
| C629     | 1-162-963-11 | CERAMIC CHIP | 680PF    | 10% | 50V    | * CN103  | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P     |  |        |
| C630     | 1-126-947-11 | ELECT        | 47uF     | 20% | 35V    | * CN104  | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P     |  |        |
| C631     | 1-162-963-11 | CERAMIC CHIP | 680PF    | 10% | 50V    | CN301    | 1-779-293-11 | CONNECTOR, FFC (LIF (NON-ZIF)) 25P |  |        |
| C632     | 1-162-963-11 | CERAMIC CHIP | 680PF    | 10% | 50V    | * CN503  | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P     |  |        |
| C633     | 1-162-968-11 | CERAMIC CHIP | 0.0047uF | 10% | 50V    | CN543    | 1-785-324-11 | PIN, CONNECTOR (STRAIGHT) 12P      |  |        |
| C635     | 1-164-245-11 | CERAMIC CHIP | 0.015uF  | 10% | 25V    | * CN602  | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P     |  |        |
| C636     | 1-136-155-00 | FILM         | 0.015uF  | 5%  | 50V    | * CN603  | 1-564-710-11 | PIN, CONNECTOR (SMALL TYPE) 8P     |  |        |
| C637     | 1-137-194-81 | FILM         | 0.47uF   | 5%  | 50V    | CN605    | 1-784-774-11 | CONNECTOR, FFC 13P                 |  |        |
| C638     | 1-106-375-12 | MYLAR        | 0.022uF  | 5%  | 200V   | * CN704  | 1-564-518-11 | PLUG, CONNECTOR 3P                 |  |        |
| C655     | 1-126-963-11 | ELECT        | 4.7uF    | 20% | 50V    | CN705    | 1-573-847-11 | CONNECTOR, BOARD TO BOARD 15P      |  |        |
| C656     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V    | CN706    | 1-568-828-11 | CONNECTOR, FFC 9P                  |  |        |
| C657     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V    | CN707    | 1-573-847-11 | CONNECTOR, BOARD TO BOARD 15P      |  |        |
| C658     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V    | * CN801  | 1-568-450-11 | HOUSING, CONNECTOR (PC BOARD) 4P   |  |        |
| C659     | 1-126-933-11 | ELECT        | 100uF    | 20% | 16V    | * CN901  | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P     |  |        |
| C660     | 1-162-919-11 | CERAMIC CHIP | 22PF     | 5%  | 50V    | CN902    | 1-785-320-11 | PIN, CONNECTOR (STRAIGHT) 8P       |  |        |
| C661     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V    |          |              | < DIODE >                          |  |        |
| C662     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V    | D102     | 8-719-069-56 | DIODE UDZSTE-176.2B                |  |        |
| C663     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V    | D111     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C664     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V    | D112     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C665     | 1-126-947-11 | ELECT        | 47uF     | 20% | 35V    | D113     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C713     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V    | D201     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C714     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V    | D202     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C715     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V    | D609     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C719     | 1-126-963-11 | ELECT        | 4.7uF    | 20% | 50V    | D610     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C723     | 1-162-974-11 | CERAMIC CHIP | 0.01uF   |     | 50V    | D611     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C724     | 1-164-227-11 | CERAMIC CHIP | 0.022uF  | 10% | 25V    | D703     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C726     | 1-164-227-11 | CERAMIC CHIP | 0.022uF  | 10% | 25V    | D704     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C734     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V    | D705     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C735     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V    | D706     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C738     | 1-119-939-51 | ELECT        | 6800uF   | 20% | 35V    | D707     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C739     | 1-126-961-11 | ELECT        | 2.2uF    | 20% | 50V    | D708     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C740     | 1-111-235-61 | ELECT        | 10000uF  | 20% | 25V    | D709     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C752     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V    | D710     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C753     | 1-136-153-00 | FILM         | 0.01uF   | 5%  | 50V    | D711     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C772     | 1-107-701-11 | ELECT        | 47uF     | 20% | 25V    | D712     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C773     | 1-107-701-11 | ELECT        | 47uF     | 20% | 25V    | D714     | 6-500-522-21 | DIODE 10EDB40-TB3                  |  |        |
| C774     | 1-109-953-11 | ELECT        | 2.2uF    | 20% | 50V    | D716     | 8-719-069-56 | DIODE UDZSTE-176.2B                |  |        |
| C775     | 1-107-701-11 | ELECT        | 47uF     | 20% | 25V    | D717     | 8-719-069-56 | DIODE UDZSTE-176.2B                |  |        |
| C791     | 1-126-963-11 | ELECT        | 4.7uF    | 20% | 50V    | D729     | 8-719-085-36 | DIODE 11EQS04-TB5                  |  |        |
| C808     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V    | D732     | 8-719-028-23 | DIODE D3SBA20-4101                 |  |        |
| C809     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V    | D733     | 8-719-028-23 | DIODE D3SBA20-4101                 |  |        |
| C810     | 1-162-918-11 | CERAMIC CHIP | 18PF     | 5%  | 50V    | D734     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C811     | 1-162-918-11 | CERAMIC CHIP | 18PF     | 5%  | 50V    | D735     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C813     | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V    | D804     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C814     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V    | D809     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C815     | 1-162-964-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V    | D810     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C816     | 1-126-935-11 | ELECT        | 470uF    | 20% | 16V    | D811     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C817     | 1-107-826-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V    | D812     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C821     | 1-164-156-11 | CERAMIC CHIP | 0.1uF    |     | 25V    | D813     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C862     | 1-126-935-11 | ELECT        | 470uF    | 20% | 16V    | D814     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C863     | 1-162-974-11 | CERAMIC CHIP | 0.01uF   |     | 50V    | D815     | 8-719-988-61 | DIODE 1SS355TE-17                  |  |        |
| C897     | 1-162-974-11 | CERAMIC CHIP | 0.01uF   |     | 50V    |          |              |                                    |  |        |
| C898     | 1-126-964-11 | ELECT        | 10uF     | 20% | 50V    |          |              |                                    |  |        |

MAIN

| Ref. No.               | Part No.     | Description                      | Remark       | Ref. No.     | Part No.     | Description | Remark           |
|------------------------|--------------|----------------------------------|--------------|--------------|--------------|-------------|------------------|
| < GROUND TERMINAL >    |              |                                  |              | Q602         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| EPT701                 | 1-537-771-21 | TERMINAL BOARD, GROUND           |              | Q603         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| < FERRITE BEAD/SHORT > |              |                                  |              | Q604         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| FB801                  | 1-500-445-21 | FERRITE, EMI (SMD) (2012)        |              | Q605         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| FB862                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q606         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| FB899                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q607         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| < IC >                 |              |                                  |              | Q608         | 8-729-026-53 | TRANSISTOR  | 2SA1576A-T106-QR |
| IC101                  | 8-759-710-97 | IC NJM4565M-D                    |              | Q609         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| IC102                  | 6-703-650-11 | IC M61529FP-D60G                 |              | Q610         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| IC301                  | 6-703-651-11 | IC M61530FP-D60G                 |              | Q611         | 8-729-029-10 | TRANSISTOR  | DTC143TUA-T106   |
| IC303                  | 8-759-710-97 | IC NJM4565M-D                    |              | Q612         | 6-550-044-01 | TRANSISTOR  | 2SB1689-T106     |
| IC601                  | 6-702-130-01 | IC HA12237F                      |              | Q613         | 6-550-044-01 | TRANSISTOR  | 2SB1689-T106     |
| IC703                  | 8-759-532-64 | IC M62703SL-TP                   |              | Q614         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| IC1104                 | 6-802-993-01 | IC M30620MCN-A29FP               |              | Q615         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| < JACK >               |              |                                  |              | Q616         | 6-550-044-01 | TRANSISTOR  | 2SB1689-T106     |
| J102                   | 1-774-785-11 | JACK, PIN 1P (SUB WOOFER OUT)    |              | Q617         | 6-550-044-01 | TRANSISTOR  | 2SB1689-T106     |
| J104                   | 1-816-918-11 | JACK, PIN 4P (MD (VIDEO) IN/OUT) |              | Q618         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| < SHORT >              |              |                                  |              | Q701         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR1                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q702         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR2                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q703         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR3                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q704         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| JR4                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q705         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| JR5                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q706         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| JR6                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q707         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR8                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q708         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| JR9                    | 1-216-864-11 | SHORT CHIP                       | 0            | Q709         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| JR15                   | 1-216-864-11 | SHORT CHIP                       | 0            | Q710         | 8-729-905-35 | TRANSISTOR  | 2SC4081-R        |
| JR16                   | 1-216-864-11 | SHORT CHIP                       | 0            | Q713         | 8-729-026-68 | TRANSISTOR  | 2SD2525 (TP)     |
| JR17                   | 1-216-864-11 | SHORT CHIP                       | 0            | Q714         | 8-729-907-00 | TRANSISTOR  | DTC114EU         |
| JR104                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q719         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR105                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q721         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JR159                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q723         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JW101                  | 1-216-864-11 | SHORT CHIP                       | 0            | Q724         | 8-729-028-73 | TRANSISTOR  | DTA114EUA-T106   |
| JW102                  | 1-216-864-11 | SHORT CHIP                       | 0            | < RESISTOR > |              |             |                  |
| JW103                  | 1-216-864-11 | SHORT CHIP                       | 0            | R102         | 1-216-841-11 | METAL CHIP  | 47K 5% 1/10W     |
| < COIL >               |              |                                  |              | R104         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
| L341                   | 1-412-064-11 | INDUCTOR (SMALL TYPE)            | 100uH        | R105         | 1-216-845-11 | METAL CHIP  | 100K 5% 1/10W    |
| < TRANSISTOR >         |              |                                  |              | R109         | 1-216-825-11 | METAL CHIP  | 2.2K 5% 1/10W    |
| Q102                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R111         | 1-216-833-11 | METAL CHIP  | 10K 5% 1/10W     |
| Q106                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R116         | 1-216-829-11 | METAL CHIP  | 4.7K 5% 1/10W    |
| Q114                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R117         | 1-216-833-11 | METAL CHIP  | 10K 5% 1/10W     |
| Q115                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R119         | 1-216-818-11 | METAL CHIP  | 560 5% 1/10W     |
| Q152                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R120         | 1-215-891-11 | METAL OXIDE | 680 5% 2W F      |
| Q153                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R121         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
| Q373                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R122         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
| Q374                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R123         | 1-216-825-11 | METAL CHIP  | 2.2K 5% 1/10W    |
| Q375                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R124         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
| Q376                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R125         | 1-216-845-11 | METAL CHIP  | 100K 5% 1/10W    |
| Q377                   | 8-729-021-15 | TRANSISTOR                       | 2SD2351T106W | R126         | 1-216-833-11 | METAL CHIP  | 10K 5% 1/10W     |
| Q601                   | 8-729-142-46 | TRANSISTOR                       | 2SC2001-LK   | R127         | 1-216-818-11 | METAL CHIP  | 560 5% 1/10W     |
|                        |              |                                  |              | R129         | 1-216-825-11 | METAL CHIP  | 2.2K 5% 1/10W    |
|                        |              |                                  |              | R130         | 1-215-891-11 | METAL OXIDE | 680 5% 2W F      |
|                        |              |                                  |              | R131         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
|                        |              |                                  |              | R132         | 1-216-821-11 | METAL CHIP  | 1K 5% 1/10W      |
|                        |              |                                  |              | R134         | 1-216-805-11 | METAL CHIP  | 47 5% 1/10W      |
|                        |              |                                  |              | R137         | 1-216-833-11 | METAL CHIP  | 10K 5% 1/10W     |
|                        |              |                                  |              | R138         | 1-216-825-11 | METAL CHIP  | 2.2K 5% 1/10W    |

| Ref. No. | Part No.     | Description |      |    | Remark | Ref. No. | Part No.     | Description |      |    | Remark |
|----------|--------------|-------------|------|----|--------|----------|--------------|-------------|------|----|--------|
| R139     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R357     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R140     | 1-216-846-11 | METAL CHIP  | 120K | 5% | 1/10W  | R359     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R141     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R360     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R146     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  | R361     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R155     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R362     | 1-216-857-11 | METAL CHIP  | 1M   | 5% | 1/10W  |
| R158     | 1-216-864-11 | SHORT CHIP  | 0    |    |        | R363     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R159     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R364     | 1-216-819-11 | METAL CHIP  | 680  | 5% | 1/10W  |
| R160     | 1-216-864-11 | SHORT CHIP  | 0    |    |        | R371     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R162     | 1-216-864-11 | SHORT CHIP  | 0    |    |        | R372     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R163     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R373     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R165     | 1-216-864-11 | SHORT CHIP  | 0    |    |        | R374     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R171     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R375     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R174     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R376     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R176     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R377     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R177     | 1-216-853-11 | METAL CHIP  | 470K | 5% | 1/10W  | R381     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R178     | 1-216-857-11 | METAL CHIP  | 1M   | 5% | 1/10W  | R382     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R179     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R383     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R183     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R384     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R184     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  | R385     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R185     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  | R386     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R201     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R387     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R202     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R388     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  |
| R203     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R389     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  |
| R204     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R393     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R251     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R394     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R252     | 1-216-845-11 | METAL CHIP  | 100K | 5% | 1/10W  | R395     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R253     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R396     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R254     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R397     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  |
| R271     | 1-216-864-11 | SHORT CHIP  | 0    |    |        | R563     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R301     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  | R601     | 1-216-830-11 | METAL CHIP  | 5.6K | 5% | 1/10W  |
| R302     | 1-216-817-11 | METAL CHIP  | 470  | 5% | 1/10W  | R602     | 1-216-830-11 | METAL CHIP  | 5.6K | 5% | 1/10W  |
| R303     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R604     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  |
| R304     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R605     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R305     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R606     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R306     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R608     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R307     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  | R609     | 1-216-824-11 | METAL CHIP  | 1.8K | 5% | 1/10W  |
| R309     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R610     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  |
| R310     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R611     | 1-216-834-11 | METAL CHIP  | 12K  | 5% | 1/10W  |
| R311     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  | R612     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R312     | 1-216-857-11 | METAL CHIP  | 1M   | 5% | 1/10W  | R613     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R313     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R614     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R314     | 1-216-819-11 | METAL CHIP  | 680  | 5% | 1/10W  | R615     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R320     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R616     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R321     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R617     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R322     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R618     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R323     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  | R620     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  |
| R330     | 1-216-857-11 | METAL CHIP  | 1M   | 5% | 1/10W  | R621     | 1-216-834-11 | METAL CHIP  | 12K  | 5% | 1/10W  |
| R331     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  | R622     | 1-216-837-11 | METAL CHIP  | 22K  | 5% | 1/10W  |
| R332     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R623     | 1-216-824-11 | METAL CHIP  | 1.8K | 5% | 1/10W  |
| R341     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  | R624     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R342     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  | R626     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R351     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  | R627     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  |
| R352     | 1-216-817-11 | METAL CHIP  | 470  | 5% | 1/10W  | R629     | 1-216-830-11 | METAL CHIP  | 5.6K | 5% | 1/10W  |
| R353     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R630     | 1-216-830-11 | METAL CHIP  | 5.6K | 5% | 1/10W  |
| R354     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  | R631     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R355     | 1-216-825-11 | METAL CHIP  | 2.2K | 5% | 1/10W  | R636     | 1-216-838-11 | METAL CHIP  | 27K  | 5% | 1/10W  |
| R356     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  | R637     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |

## MAIN

| Ref. No. | Part No.     | Description |      |      | Remark | Ref. No. | Part No.     | Description |      |    | Remark |
|----------|--------------|-------------|------|------|--------|----------|--------------|-------------|------|----|--------|
| R638     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R767     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R639     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R768     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R658     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R769     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R659     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R770     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R660     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R774     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R661     | 1-216-809-11 | METAL CHIP  | 100  | 5%   | 1/10W  | R776     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R662     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R777     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R663     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R778     | 1-216-841-11 | METAL CHIP  | 47K  | 5% | 1/10W  |
| R664     | 1-216-857-11 | METAL CHIP  | 1M   | 5%   | 1/10W  | R779     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  |
| R665     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R780     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R666     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R801     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R667     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R802     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R668     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R803     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R669     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R804     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R670     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R805     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R675     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R806     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R676     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R807     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R677     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R808     | 1-216-864-11 | SHORT CHIP  | 0    |    |        |
| R678     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R809     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R679     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R810     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R680     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R811     | 1-216-851-11 | METAL CHIP  | 330K | 5% | 1/10W  |
| R681     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R812     | 1-216-829-11 | METAL CHIP  | 4.7K | 5% | 1/10W  |
| R682     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R817     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R683     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R818     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R684     | 1-216-819-11 | METAL CHIP  | 680  | 5%   | 1/10W  | R819     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R685     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R820     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R686     | 1-216-819-11 | METAL CHIP  | 680  | 5%   | 1/10W  | R821     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R687     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R822     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R688     | 1-216-819-11 | METAL CHIP  | 680  | 5%   | 1/10W  | R823     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R689     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R824     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R691     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R825     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R692     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R826     | 1-216-833-11 | METAL CHIP  | 10K  | 5% | 1/10W  |
| R706     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R829     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R707     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R830     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R708     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R831     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R709     | 1-216-845-11 | METAL CHIP  | 100K | 5%   | 1/10W  | R832     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R710     | 1-216-827-11 | METAL CHIP  | 3.3K | 5%   | 1/10W  | R833     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R726     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R834     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R727     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R835     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R729     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R839     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R730     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R840     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R736     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R841     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R743     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R842     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R744     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R843     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R745     | 1-216-817-11 | METAL CHIP  | 470  | 5%   | 1/10W  | R844     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R746     | 1-216-829-11 | METAL CHIP  | 4.7K | 5%   | 1/10W  | R845     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R747     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R846     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R748     | 1-216-849-11 | METAL CHIP  | 220K | 5%   | 1/10W  | R847     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R749     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R848     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R750     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R849     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R753     | 1-218-867-11 | METAL CHIP  | 6.8K | 0.5% | 1/10W  | R850     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R754     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R851     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R755     | 1-216-837-11 | METAL CHIP  | 22K  | 5%   | 1/10W  | R852     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R760     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  | R853     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R761     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R854     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R762     | 1-216-833-11 | METAL CHIP  | 10K  | 5%   | 1/10W  | R855     | 1-216-809-11 | METAL CHIP  | 100  | 5% | 1/10W  |
| R764     | 1-216-841-11 | METAL CHIP  | 47K  | 5%   | 1/10W  | R856     | 1-216-821-11 | METAL CHIP  | 1K   | 5% | 1/10W  |
| R766     | 1-216-821-11 | METAL CHIP  | 1K   | 5%   | 1/10W  |          |              |             |      |    |        |

113

## MB03

| Ref. No. | Part No.     | Description  |          |     |      | Remark | Ref. No. | Part No.     | Description  |          |     |      | Remark |
|----------|--------------|--------------|----------|-----|------|--------|----------|--------------|--------------|----------|-----|------|--------|
| C270     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C545     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
| C271     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C547     | 1-107-725-11 | CERAMIC CHIP | 0.1uF    | 10% | 16V  |        |
|          |              |              |          |     |      |        | C548     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |
| C272     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C551     | 1-125-891-11 | CERAMIC CHIP | 0.47uF   | 10% | 10V  |        |
| C275     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C552     | 1-216-295-00 | SHORT CHIP   | 0        |     |      |        |
| C281     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        |          |              |              |          |     |      |        |
| C282     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C553     | 1-164-940-11 | CERAMIC CHIP | 0.0033uF | 10% | 16V  |        |
| C289     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C556     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
|          |              |              |          |     |      |        | C558     | 1-126-209-11 | ELECT CHIP   | 100uF    | 20% | 4V   |        |
| C302     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C559     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C303     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C560     | 1-164-938-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V  |        |
| C304     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |          |              |              |          |     |      |        |
| C305     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C561     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C306     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C563     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  |        |
|          |              |              |          |     |      |        | C565     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C307     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C567     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C308     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  |        | C568     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
| C309     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  |        |          |              |              |          |     |      |        |
| C315     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C569     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C316     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C570     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
|          |              |              |          |     |      |        | C573     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  |        |
| C321     | 1-126-206-11 | ELECT CHIP   | 100uF    | 20% | 6.3V |        | C588     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        |
| C322     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        | C589     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        |
| C323     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |          |              |              |          |     |      |        |
| C324     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        | C590     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        |
| C325     | 1-126-209-11 | ELECT CHIP   | 100uF    | 20% | 4V   |        | C592     | 1-126-607-11 | ELECT CHIP   | 47uF     | 20% | 4V   |        |
|          |              |              |          |     |      |        | C701     | 1-100-391-21 | ELECT CHIP   | 180uF    | 20% | 2.5V |        |
| C326     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C702     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
| C392     | 1-126-395-11 | ELECT CHIP   | 22uF     | 20% | 16V  |        | C703     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C393     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        |          |              |              |          |     |      |        |
| C394     | 1-126-246-11 | ELECT CHIP   | 220uF    | 20% | 4V   |        | C705     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |
| C412     | 1-216-864-11 | SHORT CHIP   | 0        |     |      |        | C706     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
|          |              |              |          |     |      |        | C708     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |
| C413     | 1-216-864-11 | SHORT CHIP   | 0        |     |      |        | C709     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C414     | 1-216-864-11 | SHORT CHIP   | 0        |     |      |        | C711     | 1-119-923-11 | CERAMIC CHIP | 0.047uF  | 10% | 10V  |        |
| C415     | 1-216-864-11 | SHORT CHIP   | 0        |     |      |        |          |              |              |          |     |      |        |
| C416     | 1-216-864-11 | SHORT CHIP   | 0        |     |      |        | C712     | 1-164-874-11 | CERAMIC CHIP | 100PF    | 5%  | 50V  |        |
| C501     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C713     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
|          |              |              |          |     |      |        | C714     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C502     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C715     | 1-164-938-11 | CERAMIC CHIP | 0.0015uF | 10% | 50V  |        |
| C503     | 1-127-772-11 | CERAMIC CHIP | 33000PF  | 10% | 10V  |        | C716     | 1-125-891-11 | CERAMIC CHIP | 0.47uF   | 10% | 10V  |        |
| C504     | 1-127-772-11 | CERAMIC CHIP | 33000PF  | 10% | 10V  |        |          |              |              |          |     |      |        |
| C506     | 1-164-934-11 | CERAMIC CHIP | 330PF    | 10% | 50V  |        | C717     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |
| C508     | 1-164-937-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  |        | C718     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
|          |              |              |          |     |      |        | C720     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C509     | 1-164-934-11 | CERAMIC CHIP | 330PF    | 10% | 50V  |        | C721     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C510     | 1-164-937-11 | CERAMIC CHIP | 0.001uF  | 10% | 50V  |        | C722     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C512     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |          |              |              |          |     |      |        |
| C514     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        | C723     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C516     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        | C724     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
|          |              |              |          |     |      |        | C725     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C517     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        | C726     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C518     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C727     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
| C519     | 1-164-943-11 | CERAMIC CHIP | 0.01uF   | 10% | 16V  |        |          |              |              |          |     |      |        |
| C522     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        | C728     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C525     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C729     | 1-117-370-11 | CERAMIC CHIP | 10uF     |     | 10V  |        |
|          |              |              |          |     |      |        | C730     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C526     | 1-126-395-11 | ELECT CHIP   | 22uF     | 20% | 16V  |        | C740     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C527     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C741     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C528     | 1-126-395-11 | ELECT CHIP   | 22uF     | 20% | 16V  |        |          |              |              |          |     |      |        |
| C529     | 1-164-947-11 | CERAMIC CHIP | 0.01uF   |     | 50V  |        | C742     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C531     | 1-119-923-11 | CERAMIC CHIP | 0.047uF  | 10% | 10V  |        | C743     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
|          |              |              |          |     |      |        | C744     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C533     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        | C745     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C534     | 1-107-819-11 | CERAMIC CHIP | 0.022uF  | 10% | 16V  |        | C752     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        |
| C535     | 1-164-939-11 | CERAMIC CHIP | 0.0022uF | 10% | 50V  |        |          |              |              |          |     |      |        |
| C543     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        | C760     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
| C544     | 1-125-777-11 | CERAMIC CHIP | 0.1uF    | 10% | 10V  |        | C761     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |
|          |              |              |          |     |      |        | C762     | 1-107-820-11 | CERAMIC CHIP | 0.1uF    |     | 16V  |        |

| Ref. No. | Part No.     | Description                     |          |       |  | Remark | Ref. No. | Part No.     | Description            |                        |  |  | Remark |
|----------|--------------|---------------------------------|----------|-------|--|--------|----------|--------------|------------------------|------------------------|--|--|--------|
| C763     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D394     | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C764     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D901     | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C765     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1101    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C766     | 1-164-874-11 | CERAMIC CHIP                    | 100PF    | 5%    |  | 50V    | D1102    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C767     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1201    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C768     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1202    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C769     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1203    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C770     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D1204    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C771     | 1-119-923-11 | CERAMIC CHIP                    | 0.047uF  | 10%   |  | 10V    | D1301    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C772     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D1302    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C773     | 1-125-891-11 | CERAMIC CHIP                    | 0.47uF   | 10%   |  | 10V    | D1303    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C774     | 1-164-941-11 | CERAMIC CHIP                    | 0.0047uF | 10%   |  | 16V    | D1304    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C775     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D1305    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C776     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1306    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C777     | 1-125-777-11 | CERAMIC CHIP                    | 0.1uF    | 10%   |  | 10V    | D1307    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C778     | 1-107-820-11 | CERAMIC CHIP                    | 0.1uF    |       |  | 16V    | D1308    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C779     | 1-117-370-11 | CERAMIC CHIP                    | 10uF     |       |  | 10V    | D1801    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C780     | 1-117-370-11 | CERAMIC CHIP                    | 10uF     |       |  | 10V    | D1802    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C781     | 1-165-643-21 | ELECT CHIP                      | 150uF    | 20%   |  | 4V     | D1803    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C782     | 1-164-938-11 | CERAMIC CHIP                    | 0.0015uF | 10%   |  | 50V    | D1804    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C783     | 1-164-938-11 | CERAMIC CHIP                    | 0.0015uF | 10%   |  | 50V    | D1805    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C901     | 1-126-209-11 | ELECT CHIP                      | 100uF    | 20%   |  | 4V     | D1806    | 8-719-988-61 | DIODE                  | 1SS355TE-17            |  |  |        |
| C902     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    |          |              | < FERRITE BEAD >       |                        |  |  |        |
| C903     | 1-126-209-11 | ELECT CHIP                      | 100uF    | 20%   |  | 4V     |          |              |                        |                        |  |  |        |
| C904     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FB902    | 1-500-284-21 | INDUCTOR, FERRITE BEAD |                        |  |  |        |
| C905     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FB903    | 1-500-284-21 | INDUCTOR, FERRITE BEAD |                        |  |  |        |
| C906     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    |          |              | < FILTER >             |                        |  |  |        |
| C907     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    |          |              |                        |                        |  |  |        |
| C908     | 1-164-874-11 | CERAMIC CHIP                    | 100PF    | 5%    |  | 50V    | FL203    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C909     | 1-164-874-11 | CERAMIC CHIP                    | 100PF    | 5%    |  | 50V    | FL204    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C910     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FL205    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C913     | 1-127-772-11 | CERAMIC CHIP                    | 33000PF  | 10%   |  | 10V    | FL206    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
|          |              |                                 |          |       |  |        | FL302    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C914     | 1-164-847-11 | CERAMIC CHIP                    | 7PF      | 0.5PF |  | 50V    |          |              |                        |                        |  |  |        |
| C915     | 1-164-847-11 | CERAMIC CHIP                    | 7PF      | 0.5PF |  | 50V    | FL303    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C916     | 1-126-209-11 | ELECT CHIP                      | 100uF    | 20%   |  | 4V     | FL501    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C917     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FL502    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C918     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FL701    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
|          |              |                                 |          |       |  |        | FL702    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C924     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    |          |              |                        |                        |  |  |        |
| C925     | 1-126-395-11 | ELECT CHIP                      | 22uF     | 20%   |  | 16V    | FL703    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C926     | 1-126-246-11 | ELECT CHIP                      | 220uF    | 20%   |  | 4V     | FL704    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C927     | 1-164-947-11 | CERAMIC CHIP                    | 0.01uF   |       |  | 50V    | FL705    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C928     | 1-117-370-11 | CERAMIC CHIP                    | 10uF     |       |  | 10V    | FL706    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
|          |              |                                 |          |       |  |        | FL901    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
| C1302    | 1-218-990-11 | SHORT CHIP                      | 0        |       |  |        |          |              |                        |                        |  |  |        |
| C1304    | 1-218-990-11 | SHORT CHIP                      | 0        |       |  |        | FL903    | 1-234-177-21 | FILTER, CHIP EMI       |                        |  |  |        |
|          |              | < CONNECTOR >                   |          |       |  |        |          |              |                        |                        |  |  |        |
| CN101    | 1-784-366-21 | CONNECTOR, FFC/FPC 7P           |          |       |  |        |          |              |                        |                        |  |  |        |
| CN102    | 1-815-954-21 | PIN, CONNECTOR (PC BOARD) 13P   |          |       |  |        |          |              |                        |                        |  |  |        |
| CN105    | 1-784-376-11 | CONNECTOR, FFC/FPC 17P          |          |       |  |        |          |              |                        |                        |  |  |        |
| CN107    | 1-784-382-21 | CONNECTOR, FFC/FPC 25P          |          |       |  |        |          |              |                        |                        |  |  |        |
| CN501    | 1-778-957-11 | CONNECTOR, FFC/FPC 29P          |          |       |  |        |          |              |                        |                        |  |  |        |
| CN901    | 1-764-177-11 | PIN, CONNECTOR (SMD) (1.5mm) 7P |          |       |  |        |          |              |                        |                        |  |  |        |
|          |              | < DIODE >                       |          |       |  |        |          |              |                        |                        |  |  |        |
| D202     | 8-719-988-61 | DIODE 1SS355TE-17               |          |       |  |        |          |              |                        |                        |  |  |        |
| D392     | 8-719-988-61 | DIODE 1SS355TE-17               |          |       |  |        |          |              |                        |                        |  |  |        |
| D393     | 8-719-988-61 | DIODE 1SS355TE-17               |          |       |  |        |          |              |                        |                        |  |  |        |
|          |              | < IC >                          |          |       |  |        |          |              |                        |                        |  |  |        |
|          |              |                                 |          |       |  |        | IC203    | 6-704-069-01 | IC                     | MT48LC4M32B2TG-6       |  |  |        |
|          |              |                                 |          |       |  |        | * IC204  | 6-703-671-01 | IC                     | BR9040F-WE2            |  |  |        |
|          |              |                                 |          |       |  |        | IC206    | 6-803-829-01 | IC                     | MBM29PL32BM90TN-DNK403 |  |  |        |
|          |              |                                 |          |       |  |        | IC207    | 6-703-540-01 | IC                     | ZIVA5X-C1F             |  |  |        |
|          |              |                                 |          |       |  |        | IC211    | 6-700-398-01 | IC                     | uPC2918T-E1            |  |  |        |
|          |              |                                 |          |       |  |        | IC216    | 6-700-437-01 | IC                     | SN74ALVCH16841DGGR     |  |  |        |
|          |              |                                 |          |       |  |        | IC252    | 8-759-680-48 | IC                     | TC7WH157FK (TE85R)     |  |  |        |
|          |              |                                 |          |       |  |        | IC302    | 6-702-007-01 | IC                     | PCM1608Y/2K            |  |  |        |
|          |              |                                 |          |       |  |        | IC392    | 8-759-583-47 | IC                     | uPC2933T-E2            |  |  |        |
|          |              |                                 |          |       |  |        | IC501    | 6-702-157-01 | IC                     | FAN8035L               |  |  |        |

MB03

| Ref. No.                            | Part No.     | Description             | Remark   | Ref. No. | Part No.     | Description               | Remark     |
|-------------------------------------|--------------|-------------------------|----------|----------|--------------|---------------------------|------------|
| IC503                               | 8-759-058-43 | IC NJM3404AV            |          | R217     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC509                               | 8-752-408-73 | IC CXD3068Q             |          | R218     | 1-469-122-21 | FERRITE, EMI (SMD) (1608) |            |
| IC701                               | 6-703-552-01 | IC TMC57929PGF-RDP      |          | R219     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC703                               | 8-759-058-43 | IC NJM3404AV            |          | R220     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC706                               | 8-759-564-30 | IC MSM51V18165B-60TSKR1 |          | R221     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC901                               | 8-753-211-15 | IC CXP973064-232R       |          | R222     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC902                               | 8-759-058-64 | IC TC7S32FU (TE85R)     |          | R223     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC903                               | 8-759-641-86 | IC BR24C16F-E2          |          | R224     | 1-216-864-11 | SHORT CHIP 0              |            |
| IC904                               | 6-702-563-01 | IC TC7W74FK-TE85L       |          | R227     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| IC906                               | 6-700-407-01 | IC SM8707GV-G-E2        |          | R230     | 1-216-803-11 | METAL CHIP 33             | 5% 1/10W   |
| IC907                               | 8-759-583-47 | IC uPC2933T-E2          |          | R231     | 1-216-803-11 | METAL CHIP 33             | 5% 1/10W   |
| < SHORT >                           |              |                         |          | R232     | 1-216-803-11 | METAL CHIP 33             | 5% 1/10W   |
| JW392                               | 1-216-864-11 | SHORT CHIP 0            |          | R233     | 1-216-864-11 | SHORT CHIP 0              |            |
| JW601                               | 1-218-990-11 | SHORT CHIP 0            |          | R234     | 1-216-833-11 | METAL CHIP 10K            | 5% 1/10W   |
| JW602                               | 1-218-990-11 | SHORT CHIP 0            |          | R239     | 1-216-809-11 | METAL CHIP 100            | 5% 1/10W   |
| JW603                               | 1-218-990-11 | SHORT CHIP 0            |          | R240     | 1-216-841-11 | METAL CHIP 47K            | 5% 1/10W   |
| JW604                               | 1-218-990-11 | SHORT CHIP 0            |          | R241     | 1-216-864-11 | SHORT CHIP 0              |            |
| JW605                               | 1-218-990-11 | SHORT CHIP 0            |          | R243     | 1-216-864-11 | SHORT CHIP 0              |            |
| JW606                               | 1-218-990-11 | SHORT CHIP 0            |          | R244     | 1-216-821-11 | METAL CHIP 1K             | 5% 1/10W   |
| JW607                               | 1-218-990-11 | SHORT CHIP 0            |          | R245     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| JW801                               | 1-218-990-11 | SHORT CHIP 0            |          | R246     | 1-216-833-11 | METAL CHIP 10K            | 5% 1/10W   |
| JW802                               | 1-218-990-11 | SHORT CHIP 0            |          | R247     | 1-216-821-11 | METAL CHIP 1K             | 5% 1/10W   |
| JW803                               | 1-218-990-11 | SHORT CHIP 0            |          | R248     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| JW804                               | 1-218-990-11 | SHORT CHIP 0            |          | R250     | 1-216-864-11 | SHORT CHIP 0              |            |
| JW805                               | 1-218-990-11 | SHORT CHIP 0            |          | R251     | 1-216-864-11 | SHORT CHIP 0              |            |
| JW806                               | 1-218-990-11 | SHORT CHIP 0            |          | R253     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| < COIL/SHORT >                      |              |                         |          | R254     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| L402                                | 1-216-296-11 | SHORT CHIP 0            |          | R255     | 1-216-864-11 | SHORT CHIP 0              |            |
| L403                                | 1-216-296-11 | SHORT CHIP 0            |          | R257     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| L404                                | 1-216-296-11 | SHORT CHIP 0            |          | R259     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| L405                                | 1-216-296-11 | SHORT CHIP 0            |          | R260     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| L406                                | 1-216-296-11 | SHORT CHIP 0            |          | R261     | 1-216-829-11 | METAL CHIP 4.7K           | 5% 1/10W   |
| L412                                | 1-216-296-11 | SHORT CHIP 0            |          | R262     | 1-216-864-11 | SHORT CHIP 0              |            |
| L413                                | 1-216-296-11 | SHORT CHIP 0            |          | R263     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| L414                                | 1-216-296-11 | SHORT CHIP 0            |          | R264     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| L415                                | 1-216-296-11 | SHORT CHIP 0            |          | R265     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| L416                                | 1-216-296-11 | SHORT CHIP 0            |          | R266     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| L901                                | 1-412-031-11 | CHIP INDUCTOR 47uH      |          | R267     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| < TRANSISTOR >                      |              |                         |          | R268     | 1-216-809-11 | METAL CHIP 100            | 5% 1/10W   |
| Q202                                | 8-729-929-26 | TRANSISTOR DTC114TE     |          | R269     | 1-216-864-11 | SHORT CHIP 0              |            |
| Q901                                | 8-729-929-26 | TRANSISTOR DTC114TE     |          | R270     | 1-216-864-11 | SHORT CHIP 0              |            |
| Q903                                | 8-729-025-28 | FET 2SK1828             |          | R273     | 1-216-864-11 | SHORT CHIP 0              |            |
| Q904                                | 8-729-025-28 | FET 2SK1828             |          | R274     | 1-216-864-11 | SHORT CHIP 0              |            |
| < RESISTOR/FERRITE BEAD/CAPACITOR > |              |                         |          | R275     | 1-216-864-11 | SHORT CHIP 0              |            |
| R10                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R276     | 1-216-864-11 | SHORT CHIP 0              |            |
| R11                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R277     | 1-216-864-11 | SHORT CHIP 0              |            |
| R12                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R278     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| R13                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R279     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| R14                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R280     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| R15                                 | 1-216-801-11 | METAL CHIP 22           | 5% 1/10W | R281     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| R207                                | 1-216-864-11 | SHORT CHIP 0            |          | R282     | 1-218-285-11 | METAL CHIP 75             | 5% 1/10W   |
| R213                                | 1-216-807-11 | METAL CHIP 68           | 5% 1/10W | R283     | 1-218-847-11 | METAL CHIP 1K             | 0.5% 1/10W |
| R214                                | 1-216-864-11 | SHORT CHIP 0            |          | R284     | 1-218-829-11 | METAL CHIP 180            | 0.5% 1/10W |
| R215                                | 1-216-864-11 | SHORT CHIP 0            |          | R288     | 1-216-864-11 | SHORT CHIP 0              |            |
|                                     |              |                         |          | R301     | 1-216-821-11 | METAL CHIP 1K             | 5% 1/10W   |
|                                     |              |                         |          | R302     | 1-216-813-11 | METAL CHIP 220            | 5% 1/10W   |
|                                     |              |                         |          | R303     | 1-216-813-11 | METAL CHIP 220            | 5% 1/10W   |

| Ref. No. | Part No.     | Description | Remark |    |       | Ref. No. | Part No.     | Description | Remark |      |       |
|----------|--------------|-------------|--------|----|-------|----------|--------------|-------------|--------|------|-------|
| R304     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R554     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R305     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R555     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R306     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R558     | 1-216-841-11 | METAL CHIP  | 47K    | 5%   | 1/10W |
| R307     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R559     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R308     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R560     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R309     | 1-216-813-11 | METAL CHIP  | 220    | 5% | 1/10W | R561     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R310     | 1-216-809-11 | METAL CHIP  | 100    | 5% | 1/10W | R562     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R311     | 1-216-809-11 | METAL CHIP  | 100    | 5% | 1/10W | R563     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R312     | 1-216-809-11 | METAL CHIP  | 100    | 5% | 1/10W | R564     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R313     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R565     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R314     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R566     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R367     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R567     | 1-216-827-11 | METAL CHIP  | 3.3K   | 5%   | 1/10W |
| R392     | 1-216-797-11 | METAL CHIP  | 10     | 5% | 1/10W | R568     | 1-216-857-11 | METAL CHIP  | 1M     | 5%   | 1/10W |
| R501     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R571     | 1-216-857-11 | METAL CHIP  | 1M     | 5%   | 1/10W |
| R502     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R572     | 1-216-853-11 | METAL CHIP  | 470K   | 5%   | 1/10W |
| R503     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R573     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R504     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R574     | 1-216-815-11 | METAL CHIP  | 330    | 5%   | 1/10W |
| R505     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R575     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R506     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R576     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R507     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R577     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R508     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R578     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R510     | 1-216-847-11 | METAL CHIP  | 150K   | 5% | 1/10W | R579     | 1-216-832-11 | METAL CHIP  | 8.2K   | 5%   | 1/10W |
| R511     | 1-216-847-11 | METAL CHIP  | 150K   | 5% | 1/10W | R580     | 1-216-839-11 | METAL CHIP  | 33K    | 5%   | 1/10W |
| R512     | 1-216-842-11 | METAL CHIP  | 56K    | 5% | 1/10W | R581     | 1-216-834-11 | METAL CHIP  | 12K    | 5%   | 1/10W |
| R513     | 1-216-842-11 | METAL CHIP  | 56K    | 5% | 1/10W | R583     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R516     | 1-216-829-11 | METAL CHIP  | 4.7K   | 5% | 1/10W | R584     | 1-216-839-11 | METAL CHIP  | 33K    | 5%   | 1/10W |
| R517     | 1-216-825-11 | METAL CHIP  | 2.2K   | 5% | 1/10W | R585     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R519     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R586     | 1-218-747-11 | METAL CHIP  | 200K   | 0.5% | 1/10W |
| R520     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R587     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R521     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R588     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R522     | 1-216-829-11 | METAL CHIP  | 4.7K   | 5% | 1/10W | R589     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R523     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R592     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R524     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R593     | 1-216-845-11 | METAL CHIP  | 100K   | 5%   | 1/10W |
| R525     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R597     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R527     | 1-216-825-11 | METAL CHIP  | 2.2K   | 5% | 1/10W | R599     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R528     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R601     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R529     | 1-216-839-11 | METAL CHIP  | 33K    | 5% | 1/10W | R615     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R530     | 1-216-842-11 | METAL CHIP  | 56K    | 5% | 1/10W | R629     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R531     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R694     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R532     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R695     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R533     | 1-216-839-11 | METAL CHIP  | 33K    | 5% | 1/10W | R696     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R534     | 1-216-842-11 | METAL CHIP  | 56K    | 5% | 1/10W | R698     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R535     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R699     | 1-216-864-11 | SHORT CHIP  | 0      |      |       |
| R536     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R700     | 1-216-832-11 | METAL CHIP  | 8.2K   | 5%   | 1/10W |
| R537     | 1-216-843-11 | METAL CHIP  | 68K    | 5% | 1/10W | R707     | 1-216-809-11 | METAL CHIP  | 100    | 5%   | 1/10W |
| R538     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R708     | 1-216-853-11 | METAL CHIP  | 470K   | 5%   | 1/10W |
| R539     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R709     | 1-216-847-11 | METAL CHIP  | 150K   | 5%   | 1/10W |
| R540     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R710     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R541     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R711     | 1-216-825-11 | METAL CHIP  | 2.2K   | 5%   | 1/10W |
| R543     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R712     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R544     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R713     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R545     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R714     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R547     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R715     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R548     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R716     | 1-216-809-11 | METAL CHIP  | 100    | 5%   | 1/10W |
| R550     | 1-216-821-11 | METAL CHIP  | 1K     | 5% | 1/10W | R717     | 1-216-845-11 | METAL CHIP  | 100K   | 5%   | 1/10W |
| R551     | 1-216-821-11 | METAL CHIP  | 1K     | 5% | 1/10W | R718     | 1-216-833-11 | METAL CHIP  | 10K    | 5%   | 1/10W |
| R552     | 1-216-821-11 | METAL CHIP  | 1K     | 5% | 1/10W | R719     | 1-216-821-11 | METAL CHIP  | 1K     | 5%   | 1/10W |
| R553     | 1-216-864-11 | SHORT CHIP  | 0      |    |       |          |              |             |        |      |       |

## MB03

| Ref. No. | Part No.     | Description | Remark |    |       | Ref. No. | Part No.     | Description  | Remark  |     |       |
|----------|--------------|-------------|--------|----|-------|----------|--------------|--------------|---------|-----|-------|
| R720     | 1-216-821-11 | METAL CHIP  | 1K     | 5% | 1/10W | R905     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R721     | 1-216-839-11 | METAL CHIP  | 33K    | 5% | 1/10W | R906     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R724     | 1-216-821-11 | METAL CHIP  | 1K     | 5% | 1/10W | R907     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R725     | 1-216-824-11 | METAL CHIP  | 1.8K   | 5% | 1/10W | R908     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R726     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R910     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R727     | 1-216-827-11 | METAL CHIP  | 3.3K   | 5% | 1/10W | R911     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R728     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R912     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R730     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R913     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R731     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R915     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R732     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R916     | 1-216-821-11 | METAL CHIP   | 1K      | 5%  | 1/10W |
| R733     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R917     | 1-216-821-11 | METAL CHIP   | 1K      | 5%  | 1/10W |
| R734     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R918     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R735     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R919     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R736     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R920     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R737     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R921     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R738     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R923     | 1-216-813-11 | METAL CHIP   | 220     | 5%  | 1/10W |
| R741     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R925     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R742     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R926     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R743     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R927     | 1-216-857-11 | METAL CHIP   | 1M      | 5%  | 1/10W |
| R744     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R930     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R745     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R931     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R746     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R932     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R747     | 1-216-839-11 | METAL CHIP  | 33K    | 5% | 1/10W | R933     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R748     | 1-216-839-11 | METAL CHIP  | 33K    | 5% | 1/10W | R935     | 1-216-829-11 | METAL CHIP   | 4.7K    | 5%  | 1/10W |
| R750     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R940     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R751     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R942     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R752     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R943     | 1-216-809-11 | METAL CHIP   | 100     | 5%  | 1/10W |
| R753     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R947     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R754     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R948     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R755     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R949     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R756     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R958     | 1-216-801-11 | METAL CHIP   | 22      | 5%  | 1/10W |
| R757     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R962     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R758     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R964     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R759     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R970     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R762     | 1-216-837-11 | METAL CHIP  | 22K    | 5% | 1/10W | R971     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R763     | 1-216-832-11 | METAL CHIP  | 8.2K   | 5% | 1/10W | R973     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R764     | 1-216-857-11 | METAL CHIP  | 1M     | 5% | 1/10W | R974     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R765     | 1-216-837-11 | METAL CHIP  | 22K    | 5% | 1/10W | R975     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R766     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R976     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R767     | 1-216-841-11 | METAL CHIP  | 47K    | 5% | 1/10W | R978     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R769     | 1-216-825-11 | METAL CHIP  | 2.2K   | 5% | 1/10W | R984     | 1-216-833-11 | METAL CHIP   | 10K     | 5%  | 1/10W |
| R770     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R988     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R776     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R990     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R777     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R991     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R778     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R992     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R780     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R994     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R781     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R995     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R784     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R996     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R785     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W | R997     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R786     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R998     | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R787     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R1000    | 1-216-829-11 | METAL CHIP   | 4.7K    | 5%  | 1/10W |
| R788     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R1001    | 1-216-864-11 | SHORT CHIP   | 0       |     |       |
| R789     | 1-216-845-11 | METAL CHIP  | 100K   | 5% | 1/10W | R1101    | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V   |
| R799     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R1201    | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V   |
| R805     | 1-216-864-11 | SHORT CHIP  | 0      |    |       | R1202    | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V   |
| R901     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R1301    | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V   |
| R902     | 1-216-801-11 | METAL CHIP  | 22     | 5% | 1/10W | R1302    | 1-162-964-11 | CERAMIC CHIP | 0.001uF | 10% | 50V   |
| R904     | 1-216-833-11 | METAL CHIP  | 10K    | 5% | 1/10W |          |              |              |         |     |       |

| MB03                          |                                   |                           |         |        |     | MOTOR (LD)                     |              |                                 | MOTOR (TB)     |        |     | PANEL |  |
|-------------------------------|-----------------------------------|---------------------------|---------|--------|-----|--------------------------------|--------------|---------------------------------|----------------|--------|-----|-------|--|
| Ref. No.                      | Part No.                          | Description               |         | Remark |     | Ref. No.                       | Part No.     | Description                     |                | Remark |     |       |  |
| R1303                         | 1-162-964-11                      | CERAMIC CHIP              | 0.001uF | 10%    | 50V | C193                           | 1-162-974-11 | CERAMIC CHIP                    | 0.01uF         |        | 50V |       |  |
| R1304                         | 1-162-964-11                      | CERAMIC CHIP              | 0.001uF | 10%    | 50V | C194                           | 1-119-943-11 | ELECT                           | 47uF           | 20%    | 50V |       |  |
| R1801                         | 1-162-964-11                      | CERAMIC CHIP              | 0.001uF | 10%    | 50V | C195                           | 1-162-974-11 | CERAMIC CHIP                    | 0.01uF         |        | 50V |       |  |
| R1802                         | 1-162-964-11                      | CERAMIC CHIP              | 0.001uF | 10%    | 50V | C197                           | 1-162-974-11 | CERAMIC CHIP                    | 0.01uF         |        | 50V |       |  |
| R1803                         | 1-162-964-11                      | CERAMIC CHIP              | 0.001uF | 10%    | 50V | C206                           | 1-162-974-11 | CERAMIC CHIP                    | 0.01uF         |        | 50V |       |  |
| R5555                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C207                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9980                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C208                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9981                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C209                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9986                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C225                           | 1-162-974-11 | CERAMIC CHIP                    | 0.01uF         |        | 50V |       |  |
| R9987                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C301                           | 1-115-872-11 | ELECT                           | 2.2uF          | 20%    | 50V |       |  |
| R9988                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C333                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9993                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C334                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9994                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C335                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9998                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C336                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| R9999                         | 1-216-864-11                      | SHORT CHIP                | 0       |        |     | C337                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| < COMPOSITION CIRCUIT BLOCK > |                                   |                           |         |        |     | C338                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB10                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C339                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB11                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C340                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB12                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C341                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB13                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C342                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB14                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C343                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB15                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C344                           | 1-162-953-11 | CERAMIC CHIP                    | 100PF          | 5%     | 50V |       |  |
| RB16                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | C353                           | 1-115-872-11 | ELECT                           | 2.2uF          | 20%    | 50V |       |  |
| RB17                          | 1-233-388-11                      | RES, NETWORK              | 68      |        |     | < CONNECTOR >                  |              |                                 |                |        |     |       |  |
| RB18                          | 1-234-524-21                      | RES, CHIP NETWORK         |         | 33     |     | CN105                          | 1-784-731-11 | CONNECTOR, FFC 9P               |                |        |     |       |  |
| RB19                          | 1-234-524-21                      | RES, CHIP NETWORK         |         | 33     |     | * CN106                        | 1-784-746-11 | CONNECTOR, FFC 24P              |                |        |     |       |  |
| RB20                          | 1-234-524-21                      | RES, CHIP NETWORK         |         | 33     |     | < FLUORESCENT INDICATOR TUBE > |              |                                 |                |        |     |       |  |
| RB21                          | 1-234-524-21                      | RES, CHIP NETWORK         |         | 33     |     | FL1001                         | 1-518-929-11 | INDICATOR TUBE, FLUORESCENT     |                |        |     |       |  |
| RB202                         | 1-234-523-21                      | RES, CHIP NETWORK         |         | 0      |     | < IC >                         |              |                                 |                |        |     |       |  |
| RB203                         | 1-234-523-21                      | RES, CHIP NETWORK         |         | 0      |     | IC101                          | 6-802-994-01 | IC uPD780232GC-082-8BT          |                |        |     |       |  |
| RB204                         | 1-234-523-21                      | RES, CHIP NETWORK         |         | 0      |     | IC102                          | 8-759-584-98 | IC SN74AHCT04NSR                |                |        |     |       |  |
| < VIBRATOR >                  |                                   |                           |         |        |     | IC801                          | 6-600-256-01 | IC GP1UM27SXX0F                 |                |        |     |       |  |
| X901                          | 1-781-945-21                      | VIBRATOR, CERAMIC (20MHz) |         |        |     | < SHORT >                      |              |                                 |                |        |     |       |  |
| X902                          | 1-795-630-11                      | VIBRATOR, CRYSTAL (27MHz) |         |        |     | JR101                          | 1-216-864-11 | SHORT CHIP                      | 0              |        |     |       |  |
| *****                         |                                   |                           |         |        |     | < LED >                        |              |                                 |                |        |     |       |  |
| 1-687-133-11                  | MOTOR (LD) BOARD                  |                           |         |        |     | LED205                         | 6-500-642-01 | LED SLR-505YCT31 (ILLUMINATION) |                |        |     |       |  |
| *****                         |                                   |                           |         |        |     | LED206                         | 6-500-644-01 | LED SLR-505DCT31 (ILLUMINATION) |                |        |     |       |  |
| 1-687-134-11                  | MOTOR (TB) BOARD                  |                           |         |        |     | LED207                         | 6-500-643-01 | LED SLR-505VCT31 (ILLUMINATION) |                |        |     |       |  |
| *****                         |                                   |                           |         |        |     | LED208                         | 6-500-642-01 | LED SLR-505YCT31 (ILLUMINATION) |                |        |     |       |  |
| < CONNECTOR >                 |                                   |                           |         |        |     | LED209                         | 6-500-644-01 | LED SLR-505DCT31 (ILLUMINATION) |                |        |     |       |  |
| CN742                         | 1-784-727-11                      | CONNECTOR, FFC 5P         |         |        |     | LED210                         | 6-500-643-01 | LED SLR-505VCT31 (ILLUMINATION) |                |        |     |       |  |
| *****                         |                                   |                           |         |        |     | < TRANSISTOR >                 |              |                                 |                |        |     |       |  |
| A-4748-808-A                  | PANEL BOARD, COMPLETE (TH)        |                           |         |        |     | Q131                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| A-4749-176-A                  | PANEL BOARD, COMPLETE (EXCEPT TH) |                           |         |        |     | Q132                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| *****                         |                                   |                           |         |        |     | Q133                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| < CAPACITOR >                 |                                   |                           |         |        |     | Q134                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| C100                          | 1-126-382-11                      | ELECT                     | 100uF   | 20%    | 16V | Q135                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| C101                          | 1-162-974-11                      | CERAMIC CHIP              | 0.01uF  |        | 50V | Q136                           | 8-729-907-00 | TRANSISTOR                      | DTC114EU       |        |     |       |  |
| C125                          | 1-126-382-11                      | ELECT                     | 100uF   | 20%    | 16V | Q168                           | 8-729-028-97 | TRANSISTOR                      | DTC114TUA-T106 |        |     |       |  |
| C191                          | 1-164-156-11                      | CERAMIC CHIP              | 0.1uF   |        | 25V |                                |              |                                 |                |        |     |       |  |
| C192                          | 1-126-382-11                      | ELECT                     | 100uF   | 20%    | 16V |                                |              |                                 |                |        |     |       |  |

| Ref. No.     | Part No.     | Description              | Remark |    |       |
|--------------|--------------|--------------------------|--------|----|-------|
| < RESISTOR > |              |                          |        |    |       |
| R106         | 1-216-821-11 | METAL CHIP               | 1K     | 5% | 1/10W |
| R107         | 1-216-809-11 | METAL CHIP               | 100    | 5% | 1/10W |
| R108         | 1-216-809-11 | METAL CHIP               | 100    | 5% | 1/10W |
| R109         | 1-216-825-11 | METAL CHIP               | 2.2K   | 5% | 1/10W |
| R120         | 1-216-835-11 | METAL CHIP               | 15K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R131         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
| R132         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
| R133         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
| R134         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
| R135         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R136         | 1-216-813-11 | METAL CHIP               | 220    | 5% | 1/10W |
| R168         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R191         | 1-216-809-11 | METAL CHIP               | 100    | 5% | 1/10W |
| R192         | 1-216-809-11 | METAL CHIP               | 100    | 5% | 1/10W |
| R194         | 1-216-809-11 | METAL CHIP               | 100    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R196         | 1-216-827-11 | METAL CHIP               | 3.3K   | 5% | 1/10W |
| R197         | 1-216-845-11 | METAL CHIP               | 100K   | 5% | 1/10W |
| R901         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R902         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R903         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R904         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R905         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R906         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R907         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R908         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R909         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R910         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R911         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R912         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R913         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R914         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R915         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R916         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R917         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R918         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R919         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R920         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R921         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R922         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R923         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R924         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R925         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R926         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R927         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R928         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R929         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R930         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R931         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R932         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
| R933         | 1-216-841-11 | METAL CHIP               | 47K    | 5% | 1/10W |
|              |              |                          |        |    |       |
| R1016        | 1-216-835-11 | METAL CHIP               | 15K    | 5% | 1/10W |
| R1036        | 1-216-835-11 | METAL CHIP               | 15K    | 5% | 1/10W |
| < VIBRATOR > |              |                          |        |    |       |
| X101         | 1-579-233-11 | VIBRATOR, CERAMIC (5MHz) |        |    |       |
| *****        |              |                          |        |    |       |

| Ref. No.                        | Part No.     | Description                        | Remark   |     |      |
|---------------------------------|--------------|------------------------------------|----------|-----|------|
| A-4728-690-A RF BOARD, COMPLETE |              |                                    |          |     |      |
| *****                           |              |                                    |          |     |      |
| < CAPACITOR >                   |              |                                    |          |     |      |
| C001                            | 1-126-206-11 | ELECT CHIP                         | 100uF    | 20% | 6.3V |
| C002                            | 1-124-779-00 | ELECT CHIP                         | 10uF     | 20% | 16V  |
| C003                            | 1-126-206-11 | ELECT CHIP                         | 100uF    | 20% | 6.3V |
| C004                            | 1-124-779-00 | ELECT CHIP                         | 10uF     | 20% | 16V  |
| C005                            | 1-128-993-21 | ELECT CHIP                         | 22uF     | 20% | 10V  |
|                                 |              |                                    |          |     |      |
| C006                            | 1-128-993-21 | ELECT CHIP                         | 22uF     | 20% | 10V  |
| C008                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C009                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C010                            | 1-115-416-11 | CERAMIC CHIP                       | 0.001uF  | 5%  | 25V  |
| C011                            | 1-115-416-11 | CERAMIC CHIP                       | 0.001uF  | 5%  | 25V  |
|                                 |              |                                    |          |     |      |
| C012                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C013                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C014                            | 1-162-966-11 | CERAMIC CHIP                       | 0.0022uF | 10% | 50V  |
| C015                            | 1-162-966-11 | CERAMIC CHIP                       | 0.0022uF | 10% | 50V  |
| C016                            | 1-162-966-11 | CERAMIC CHIP                       | 0.0022uF | 10% | 50V  |
|                                 |              |                                    |          |     |      |
| C017                            | 1-162-966-11 | CERAMIC CHIP                       | 0.0022uF | 10% | 50V  |
| C018                            | 1-164-172-11 | CERAMIC CHIP                       | 0.0056uF | 10% | 25V  |
| C019                            | 1-164-172-11 | CERAMIC CHIP                       | 0.0056uF | 10% | 25V  |
| C020                            | 1-162-919-11 | CERAMIC CHIP                       | 22PF     | 5%  | 50V  |
| C021                            | 1-162-919-11 | CERAMIC CHIP                       | 22PF     | 5%  | 50V  |
|                                 |              |                                    |          |     |      |
| C022                            | 1-162-919-11 | CERAMIC CHIP                       | 22PF     | 5%  | 50V  |
| C023                            | 1-162-919-11 | CERAMIC CHIP                       | 22PF     | 5%  | 50V  |
| C024                            | 1-162-970-11 | CERAMIC CHIP                       | 0.01uF   | 10% | 25V  |
| C025                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C026                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
|                                 |              |                                    |          |     |      |
| C027                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C028                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C029                            | 1-162-970-11 | CERAMIC CHIP                       | 0.01uF   | 10% | 25V  |
| C030                            | 1-162-970-11 | CERAMIC CHIP                       | 0.01uF   | 10% | 25V  |
| C031                            | 1-115-416-11 | CERAMIC CHIP                       | 0.001uF  | 5%  | 25V  |
|                                 |              |                                    |          |     |      |
| C032                            | 1-165-176-11 | CERAMIC CHIP                       | 0.047uF  | 10% | 16V  |
| C033                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C034                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C035                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C036                            | 1-125-891-11 | CERAMIC CHIP                       | 0.47uF   | 10% | 10V  |
|                                 |              |                                    |          |     |      |
| C037                            | 1-162-959-11 | CERAMIC CHIP                       | 330PF    | 5%  | 50V  |
| C038                            | 1-164-677-11 | CERAMIC CHIP                       | 0.033uF  | 10% | 16V  |
| C039                            | 1-164-677-11 | CERAMIC CHIP                       | 0.033uF  | 10% | 16V  |
| C040                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| C041                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
|                                 |              |                                    |          |     |      |
| C042                            | 1-164-218-11 | CERAMIC CHIP                       | 180PF    | 5%  | 50V  |
| C049                            | 1-107-826-11 | CERAMIC CHIP                       | 0.1uF    | 10% | 16V  |
| < CONNECTOR >                   |              |                                    |          |     |      |
| CN001                           | 1-815-031-11 | CONNECTOR, FFC/FPC (ZIF) 24P       |          |     |      |
| CN002                           | 1-784-836-21 | CONNECTOR, FFC (LIF (NON-ZIF)) 29P |          |     |      |
| CN003                           | 1-784-861-21 | CONNECTOR, FFC (LIF (NON-ZIF)) 9P  |          |     |      |
| < DIODE >                       |              |                                    |          |     |      |
| D001                            | 8-719-988-61 | DIODE 1SS355TE-17                  |          |     |      |
| D002                            | 8-719-988-61 | DIODE 1SS355TE-17                  |          |     |      |

|          |                |                                 |     |        |       | RF       | SENSOR       |                                       | SUB TRANS |             | SURROUND AMP |  |  |  |
|----------|----------------|---------------------------------|-----|--------|-------|----------|--------------|---------------------------------------|-----------|-------------|--------------|--|--|--|
| Ref. No. | Part No.       | Description                     |     | Remark |       | Ref. No. | Part No.     | Description                           |           | Remark      |              |  |  |  |
|          |                | < IC >                          |     |        |       |          | A-4748-815-A | SUB TRANS BOARD, COMPLETE (TH)        |           |             |              |  |  |  |
| IC001    | 6-703-551-01   | IC SP3723BDAOPM                 |     |        |       |          | A-4749-191-A | SUB TRANS BOARD, COMPLETE (EXCEPT TH) |           | *****       |              |  |  |  |
|          |                | < COIL >                        |     |        |       |          | 1-533-217-41 | HOLDER, FUSE                          |           |             |              |  |  |  |
| L001     | 1-412-031-11   | CHIP INDUCTOR 47uH              |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
| L002     | 1-412-031-11   | CHIP INDUCTOR 47uH              |     |        |       | △ C901   | 1-113-925-11 | CERAMIC                               | 0.01uF    | 20%         | 250V         |  |  |  |
|          |                | < TRANSISTOR >                  |     |        |       | C902     | 1-126-768-11 | ELECT                                 | 2200uF    | 20%         | 16V          |  |  |  |
| Q001     | 8-729-903-46   | TRANSISTOR 2SB1132-P            |     |        |       | C903     | 1-126-933-11 | ELECT                                 | 100uF     | 20%         | 16V          |  |  |  |
| Q002     | 8-729-903-46   | TRANSISTOR 2SB1132-P            |     |        |       | C904     | 1-164-159-11 | CERAMIC                               | 0.1uF     |             | 50V          |  |  |  |
|          |                | < RESISTOR >                    |     |        |       |          |              | < CONNECTOR >                         |           |             |              |  |  |  |
| R001     | 1-218-668-11   | METAL CHIP                      | 100 | 0.5%   | 1/10W | CN901    | 1-564-321-00 | PIN, CONNECTOR (3.96mm PITCH) 2P      |           |             |              |  |  |  |
| R003     | 1-216-803-11   | METAL CHIP                      | 33  | 5%     | 1/10W | CN902    | 1-568-106-11 | PIN, CONNECTOR (3.96mm PITCH) 4P      |           |             |              |  |  |  |
| R004     | 1-216-803-11   | METAL CHIP                      | 33  | 5%     | 1/10W | CN903    | 1-506-468-11 | PIN, CONNECTOR 3P                     |           |             |              |  |  |  |
| R005     | 1-216-841-11   | METAL CHIP                      | 47K | 5%     | 1/10W |          |              | < DIODE >                             |           |             |              |  |  |  |
| R006     | 1-216-817-11   | METAL CHIP                      | 470 | 5%     | 1/10W | D901     | 8-719-991-33 | DIODE 1SS133T-77                      |           |             |              |  |  |  |
| R007     | 1-216-803-11   | METAL CHIP                      | 33  | 5%     | 1/10W | D902     | 6-500-522-11 | DIODE 10EDB40-TA2B5                   |           |             |              |  |  |  |
| R008     | 1-216-803-11   | METAL CHIP                      | 33  | 5%     | 1/10W | D903     | 6-500-522-11 | DIODE 10EDB40-TA2B5                   |           |             |              |  |  |  |
| R009     | 1-216-841-11   | METAL CHIP                      | 47K | 5%     | 1/10W | D904     | 6-500-522-11 | DIODE 10EDB40-TA2B5                   |           |             |              |  |  |  |
| R010     | 1-216-817-11   | METAL CHIP                      | 470 | 5%     | 1/10W | D905     | 6-500-522-11 | DIODE 10EDB40-TA2B5                   |           |             |              |  |  |  |
| R011     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          |              | < IC >                                |           |             |              |  |  |  |
| R012     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | IC901    | 6-701-760-01 | IC uPC3504AHF                         |           |             |              |  |  |  |
| R013     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          |              | < TRANSISTOR >                        |           |             |              |  |  |  |
| R014     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | Q901     | 8-729-119-78 | TRANSISTOR 2SC2785-HFE                |           |             |              |  |  |  |
| R015     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          |              | < RESISTOR >                          |           |             |              |  |  |  |
| R016     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | R903     | 1-249-429-11 | CARBON                                | 10K       | 5%          | 1/4W         |  |  |  |
| R017     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | R904     | 1-249-397-11 | CARBON                                | 22        | 5%          | 1/4W         |  |  |  |
| R018     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          |              | < RELAY >                             |           |             |              |  |  |  |
| R019     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | △ RY901  | 1-755-467-11 | RELAY (POWER)                         |           |             |              |  |  |  |
| R020     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          |              | < SWITCH >                            |           |             |              |  |  |  |
| R021     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | △ S901   | 1-786-055-21 | SELECTOR, VOLTAGE (VOLTAGE SELECT)    |           |             |              |  |  |  |
| R022     | 1-216-813-11   | METAL CHIP                      | 220 | 5%     | 1/10W |          |              | < TRANSFORMER >                       |           |             |              |  |  |  |
| R023     | 1-216-820-11   | METAL CHIP                      | 820 | 5%     | 1/10W | △ T901   | 1-437-677-11 | TRANSFORMER, POWER                    |           | *****       |              |  |  |  |
| R024     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       |          | A-4748-811-A | SURROUND AMP BOARD, COMPLETE (TH)     |           |             |              |  |  |  |
| R025     | 1-216-809-11   | METAL CHIP                      | 100 | 5%     | 1/10W |          | A-4749-179-A | SURROUND AMP BOARD, COMPLETE          |           | (EXCEPT TH) |              |  |  |  |
| R026     | 1-218-718-11   | METAL CHIP                      | 12K | 0.5%   | 1/10W |          |              | < CAPACITOR >                         |           | *****       |              |  |  |  |
| R027     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | C301     | 1-126-964-11 | ELECT                                 | 10uF      | 20%         | 50V          |  |  |  |
| R028     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | C302     | 1-162-294-31 | CERAMIC                               | 0.001uF   | 10%         | 50V          |  |  |  |
| R029     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | C303     | 1-162-286-31 | CERAMIC                               | 220PF     | 10%         | 50V          |  |  |  |
| R032     | 1-216-809-11   | METAL CHIP                      | 100 | 5%     | 1/10W | C304     | 1-126-964-11 | ELECT                                 | 10uF      | 20%         | 50V          |  |  |  |
| R033     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | C306     | 1-136-165-00 | FILM                                  | 0.1uF     | 5%          | 50V          |  |  |  |
| R034     | 1-219-570-11   | METAL CHIP                      | 10M | 5%     | 1/10W | C307     | 1-136-165-00 | FILM                                  | 0.1uF     | 5%          | 50V          |  |  |  |
| R035     | 1-216-864-11   | SHORT CHIP                      | 0   |        |       | C308     | 1-126-968-11 | ELECT                                 | 100uF     | 20%         | 50V          |  |  |  |
| R041     | 1-216-821-11   | METAL CHIP                      | 1K  | 5%     | 1/10W | C310     | 1-162-199-31 | CERAMIC                               | 10PF      | 5%          | 50V          |  |  |  |
| *****    |                |                                 |     |        |       |          |              | < TRANSFORMER >                       |           |             |              |  |  |  |
|          | 1-687-132-11   | SENSOR BOARD                    |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
|          |                | *****                           |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
|          |                | < CONNECTOR >                   |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
| CN731    | 1-785-329-21   | PIN, CONNECTOR (LIGHT ANGLE) 3P |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
|          |                | < IC >                          |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
| IC731    | (Not supplied) |                                 |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |
| *****    |                |                                 |     |        |       |          |              | < CAPACITOR >                         |           |             |              |  |  |  |

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

## SURROUND AMP

| Ref. No.       | Part No.     | Description                     | Remark  |     |     |  |
|----------------|--------------|---------------------------------|---------|-----|-----|--|
| C311           | 1-162-199-31 | CERAMIC                         | 10PF    | 5%  | 50V |  |
| C312           | 1-162-199-31 | CERAMIC                         | 10PF    | 5%  | 50V |  |
| C313           | 1-162-199-31 | CERAMIC                         | 10PF    | 5%  | 50V |  |
| C341           | 1-126-964-11 | ELECT                           | 10uF    | 20% | 50V |  |
| C342           | 1-162-294-31 | CERAMIC                         | 0.001uF | 10% | 50V |  |
| C343           | 1-162-286-31 | CERAMIC                         | 220PF   | 10% | 50V |  |
| C344           | 1-126-964-11 | ELECT                           | 10uF    | 20% | 50V |  |
| C346           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C347           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C351           | 1-126-964-11 | ELECT                           | 10uF    | 20% | 50V |  |
| C352           | 1-162-294-31 | CERAMIC                         | 0.001uF | 10% | 50V |  |
| C353           | 1-162-286-31 | CERAMIC                         | 220PF   | 10% | 50V |  |
| C354           | 1-126-964-11 | ELECT                           | 10uF    | 20% | 50V |  |
| C356           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C357           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C381           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C382           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C383           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C384           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C385           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| C386           | 1-136-165-00 | FILM                            | 0.1uF   | 5%  | 50V |  |
| < CONNECTOR >  |              |                                 |         |     |     |  |
| CN302          | 1-785-318-11 | PIN, CONNECTOR (STRAIGHT) 6P    |         |     |     |  |
| CN303          | 1-785-318-11 | PIN, CONNECTOR (STRAIGHT) 6P    |         |     |     |  |
| CN304          | 1-785-332-11 | PIN, CONNECTOR (LIGHT ANGLE) 6P |         |     |     |  |
| CN371          | 1-564-506-11 | PLUG, CONNECTOR 3P              |         |     |     |  |
| CN372          | 1-564-507-11 | PLUG, CONNECTOR 4P              |         |     |     |  |
| < DIODE >      |              |                                 |         |     |     |  |
| D301           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D341           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D351           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D381           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D382           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D391           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| D491           | 8-719-991-33 | DIODE 1SS133T-77                |         |     |     |  |
| < IC >         |              |                                 |         |     |     |  |
| IC301          | 6-600-173-01 | IC STK403-240                   |         |     |     |  |
| < COIL >       |              |                                 |         |     |     |  |
| L381           | 1-420-872-52 | COIL, AIR-CORE                  |         |     |     |  |
| L382           | 1-420-872-52 | COIL, AIR-CORE                  |         |     |     |  |
| L383           | 1-420-872-52 | COIL, AIR-CORE                  |         |     |     |  |
| < TRANSISTOR > |              |                                 |         |     |     |  |
| Q301           | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA       |         |     |     |  |
| Q316           | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA       |         |     |     |  |
| Q317           | 8-729-119-78 | TRANSISTOR 2SC2785-HFE          |         |     |     |  |
| Q341           | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA       |         |     |     |  |
| Q351           | 8-729-140-84 | TRANSISTOR 2SC1841-PAFAEA       |         |     |     |  |
| Q381           | 8-729-026-39 | TRANSISTOR 2SA933AS-QT          |         |     |     |  |
| Q383           | 8-729-026-39 | TRANSISTOR 2SA933AS-QT          |         |     |     |  |
| Q384           | 8-729-029-66 | TRANSISTOR DTC114ESA            |         |     |     |  |

| Ref. No.     | Part No.     | Description |      |     |      | Remark |
|--------------|--------------|-------------|------|-----|------|--------|
| < RESISTOR > |              |             |      |     |      |        |
| R301         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R302         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| R303         | 1-249-413-11 | CARBON      | 470  | 5%  | 1/4W |        |
| R304         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| △ R305       | 1-208-602-11 | METAL       | 0.22 | 10% | 2W   | F      |
| R307         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R308         | 1-249-431-11 | CARBON      | 15K  | 5%  | 1/4W |        |
| R309         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| R310         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| △ R311       | 1-212-881-11 | FUSIBLE     | 100  | 5%  | 1/4W | F      |
| R315         | 1-249-433-11 | CARBON      | 22K  | 5%  | 1/4W |        |
| R316         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| R317         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| R318         | 1-249-428-11 | CARBON      | 8.2K | 5%  | 1/4W |        |
| R319         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| △ R320       | 1-202-972-61 | FUSIBLE     | 1    | 5%  | 1/4W | F      |
| △ R321       | 1-202-972-61 | FUSIBLE     | 1    | 5%  | 1/4W | F      |
| R331         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| R332         | 1-249-438-11 | CARBON      | 56K  | 5%  | 1/4W |        |
| R333         | 1-249-439-11 | CARBON      | 68K  | 5%  | 1/4W |        |
| R341         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R342         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| R343         | 1-249-420-11 | CARBON      | 1.8K | 5%  | 1/4W |        |
| R344         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| △ R345       | 1-208-602-11 | METAL       | 0.22 | 10% | 2W   | F      |
| R347         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R348         | 1-249-431-11 | CARBON      | 15K  | 5%  | 1/4W |        |
| R349         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| R350         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| R351         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R352         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| R353         | 1-249-413-11 | CARBON      | 470  | 5%  | 1/4W |        |
| R354         | 1-249-437-11 | CARBON      | 47K  | 5%  | 1/4W |        |
| △ R355       | 1-208-602-11 | METAL       | 0.22 | 10% | 2W   | F      |
| R357         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R358         | 1-249-431-11 | CARBON      | 15K  | 5%  | 1/4W |        |
| R359         | 1-249-441-11 | CARBON      | 100K | 5%  | 1/4W |        |
| R360         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| R381         | 1-260-330-11 | CARBON      | 1.5K | 5%  | 1/2W |        |
| R382         | 1-260-330-11 | CARBON      | 1.5K | 5%  | 1/2W |        |
| R383         | 1-260-330-11 | CARBON      | 1.5K | 5%  | 1/2W |        |
| R385         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| R386         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| R390         | 1-249-429-11 | CARBON      | 10K  | 5%  | 1/4W |        |
| R391         | 1-260-076-11 | CARBON      | 10   | 5%  | 1/2W |        |
| △ R394       | 1-215-888-00 | METAL OXIDE | 220  | 5%  | 2W   | F      |
| R395         | 1-249-429-11 | CARBON      | 10K  | 5%  | 1/4W |        |
| R396         | 1-249-433-11 | CARBON      | 22K  | 5%  | 1/4W |        |
| R397         | 1-249-417-11 | CARBON      | 1K   | 5%  | 1/4W |        |
| R398         | 1-249-433-11 | CARBON      | 22K  | 5%  | 1/4W |        |
| △ R399       | 1-215-888-00 | METAL OXIDE | 220  | 5%  | 2W   | F      |
| < RELAY >    |              |             |      |     |      |        |
| RY381        | 1-515-920-11 | RELAY       |      |     |      |        |
| RY382        | 1-515-920-11 | RELAY       |      |     |      |        |

The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

## SURROUND AMP

## SW

## TRANS

## VIDEO

| Ref. No. | Part No.     | Description                                      | Remark | Ref. No.     | Part No.                          | Description                        | Remark |
|----------|--------------|--------------------------------------------------|--------|--------------|-----------------------------------|------------------------------------|--------|
|          |              | < THERMISTOR >                                   |        |              |                                   |                                    |        |
| TH301    | 1-807-796-11 | THERMISTOR                                       |        | A-4748-816-A | VIDEO BOARD, COMPLETE (TH)        |                                    |        |
|          |              | < TERMINAL >                                     |        | A-4749-192-A | VIDEO BOARD, COMPLETE (EXCEPT TH) |                                    |        |
| TM401    | 1-694-674-22 | TERMINAL BOARD (6P)<br>(CENTER/SURROUND SPEAKER) |        |              | *****                             |                                    |        |
|          |              | *****                                            |        |              | < CAPACITOR >                     |                                    |        |
|          | 1-687-669-11 | SW BOARD                                         |        | C800         | 1-126-935-11                      | ELECT 470uF 20% 16V                |        |
|          |              | *****                                            |        | C801         | 1-162-306-11                      | CERAMIC 0.01uF 20% 16V             |        |
|          |              | < SWITCH >                                       |        | C802         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
| S751     | 1-786-514-11 | SWITCH, LEVER (SLIDE)<br>(OPEN/CLOSE DETECT)     |        | C804         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
|          |              | *****                                            |        | C806         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
|          | A-4748-814-A | TRANS BOARD, COMPLETE (TH)                       |        | C807         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
|          | A-4749-190-A | TRANS BOARD, COMPLETE (EXCEPT TH)                |        | C808         | 1-162-306-11                      | CERAMIC 0.01uF 20% 16V             |        |
|          |              | *****                                            |        | C810         | 1-164-159-11                      | CERAMIC 0.1uF 50V                  |        |
|          | 1-533-217-41 | HOLDER, FUSE                                     |        | C812         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
|          |              | < CAPACITOR >                                    |        | C814         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
| C271     | 1-130-777-00 | MYLAR 0.1uF 5% 100V                              |        | C816         | 1-126-960-11                      | ELECT 1uF 20% 50V                  |        |
| C272     | 1-130-777-00 | MYLAR 0.1uF 5% 100V                              |        | C817         | 1-162-294-31                      | CERAMIC 0.001uF 10% 50V            |        |
| C371     | 1-136-153-00 | FILM 0.01uF 5% 50V                               |        | C818         | 1-126-965-91                      | ELECT 22uF 20% 50V                 |        |
| C372     | 1-136-153-00 | FILM 0.01uF 5% 50V                               |        | C819         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
| C912     | 1-126-960-11 | ELECT 1uF 20% 50V                                |        | C821         | 1-126-965-91                      | ELECT 22uF 20% 50V                 |        |
| C913     | 1-126-968-11 | ELECT 100uF 20% 50V                              |        | C822         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
| C915     | 1-164-159-11 | CERAMIC 0.1uF 50V                                |        | C824         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
| C918     | 1-128-576-11 | ELECT 100uF 20% 63V                              |        | C827         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
| C929     | 1-126-964-11 | ELECT 10uF 20% 50V                               |        | C830         | 1-104-665-11                      | ELECT 100uF 20% 25V                |        |
| C930     | 1-126-964-11 | ELECT 10uF 20% 50V                               |        | C833         | 1-164-159-11                      | CERAMIC 0.1uF 50V                  |        |
|          |              | < CONNECTOR >                                    |        | C840         | 1-162-282-31                      | CERAMIC 100PF 10% 50V              |        |
| * CN913  | 1-564-518-11 | PLUG, CONNECTOR 3P                               |        | C841         | 1-126-935-11                      | ELECT 470uF 20% 16V                |        |
| * CN914  | 1-564-526-11 | PLUG, CONNECTOR 11P                              |        | C851         | 1-126-934-11                      | ELECT 220uF 20% 16V                |        |
| * CN915  | 1-564-519-11 | PLUG, CONNECTOR 4P                               |        | C852         | 1-126-964-11                      | ELECT 10uF 20% 50V                 |        |
|          |              | < DIODE >                                        |        | C860         | 1-126-942-61                      | ELECT 1000uF 20% 25V               |        |
| D271     | 8-719-510-68 | DIODE D5SBA204101                                |        | C861         | 1-117-245-91                      | ELECT 330uF 20% 6.3V               |        |
| D371     | 8-719-510-68 | DIODE D5SBA204101                                |        | C862         | 1-128-646-91                      | ELECT 1000uF 20% 6.3V              |        |
| D911     | 6-500-522-11 | DIODE 10EDB40-TA2B5                              |        | C863         | 1-117-317-91                      | ELECT 1000uF 20% 25V               |        |
| D912     | 8-719-982-15 | DIODE MTZJ-27B                                   |        | C871         | 1-117-245-91                      | ELECT 330uF 20% 6.3V               |        |
| D913     | 8-719-160-29 | DIODE RD6.2FB2                                   |        | C872         | 1-128-646-91                      | ELECT 1000uF 20% 6.3V              |        |
|          |              | < TRANSISTOR >                                   |        | C873         | 1-117-317-91                      | ELECT 1000uF 20% 25V               |        |
| Q971     | 8-729-048-52 | TRANSISTOR 2SA1932 (TP)                          |        | C876         | 1-117-245-91                      | ELECT 330uF 20% 6.3V               |        |
|          |              | < RESISTOR >                                     |        | C877         | 1-117-245-91                      | ELECT 330uF 20% 6.3V               |        |
| △R911    | 1-219-124-11 | FUSIBLE 0.68 5% 1/4W F                           |        |              | < CONNECTOR >                     |                                    |        |
| R914     | 1-249-429-11 | CARBON 10K 5% 1/4W                               |        | CN801        | 1-779-285-11                      | CONNECTOR, FFC (LIF (NON-ZIF)) 17P |        |
| R915     | 1-247-807-31 | CARBON 100 5% 1/4W                               |        | * CN804      | 1-564-730-11                      | PIN, CONNECTOR (SMALL TYPE) 14P    |        |
| R916     | 1-247-807-31 | CARBON 100 5% 1/4W                               |        |              | < DIODE >                         |                                    |        |
| R917     | 1-249-393-11 | CARBON 10 5% 1/4W                                |        | D838         | 8-719-991-33                      | DIODE 1SS133T-77                   |        |
| R938     | 1-249-429-11 | CARBON 10K 5% 1/4W                               |        | D861         | 8-719-210-21                      | DIODE 11EQS04                      |        |
|          |              | *****                                            |        | D871         | 8-719-210-21                      | DIODE 11EQS04                      |        |
|          |              |                                                  |        |              | < GROUND TERMINAL >               |                                    |        |
|          |              |                                                  |        | EP802        | 1-537-771-21                      | TERMINAL BOARD, GROUND             |        |
|          |              |                                                  |        |              | < IC >                            |                                    |        |
|          |              |                                                  |        | IC801        | 6-702-335-01                      | IC MM1568AJBE                      |        |
|          |              |                                                  |        | IC803        | 8-759-231-53                      | IC TA7805S                         |        |
|          |              |                                                  |        | IC804        | 8-759-659-28                      | IC SI-8033S                        |        |
|          |              |                                                  |        | IC805        | 8-759-474-09                      | IC SI-8050S-LF1101                 |        |

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Replace only with part number specified.

VIDEO

| Ref. No.       | Part No.     | Description                             | Remark       |
|----------------|--------------|-----------------------------------------|--------------|
| < JACK >       |              |                                         |              |
| J801           | 1-817-449-11 | JACK, PIN 3P (COMPONENT VIDEO OUT)      |              |
| J802           | 1-774-227-11 | JACK, PIN 1P (VIDEO OUT)                |              |
| J803           | 1-537-943-11 | TERMINAL, S (S VIDEO OUT)               |              |
| < COIL >       |              |                                         |              |
| L800           | 1-410-470-11 | MICRO INDUCTOR                          | 10uH         |
| L861           | 1-456-513-11 | COIL, CHOKE                             | 150uH        |
| L862           | 1-410-397-21 | FERRITE BEAD INDUCTOR                   | 1.1uH        |
| L871           | 1-456-513-11 | COIL, CHOKE                             | 150uH        |
| L872           | 1-414-741-11 | INDUCTOR, MICRO                         | 10uH         |
| < TRANSISTOR > |              |                                         |              |
| Q801           | 8-729-029-21 | TRANSISTOR                              | DTA114ESA-TP |
| Q802           | 8-729-029-66 | TRANSISTOR                              | DTC114ESA    |
| Q851           | 8-729-040-20 | TRANSISTOR                              | RT1P137L-TP  |
| Q852           | 8-729-029-66 | TRANSISTOR                              | DTC114ESA    |
| Q853           | 8-729-029-66 | TRANSISTOR                              | DTC114ESA    |
| Q855           | 8-729-029-66 | TRANSISTOR                              | DTC114ESA    |
| Q857           | 8-729-029-66 | TRANSISTOR                              | DTC114ESA    |
| < RESISTOR >   |              |                                         |              |
| R803           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| R815           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| R818           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R821           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R824           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R827           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R830           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R833           | 1-247-804-11 | CARBON                                  | 75 5% 1/4W   |
| R834           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| R835           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| R838           | 1-249-403-11 | CARBON                                  | 68 5% 1/4W   |
| R839           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| R851           | 1-249-429-11 | CARBON                                  | 10K 5% 1/4W  |
| *****          |              |                                         |              |
| MISCELLANEOUS  |              |                                         |              |
| *****          |              |                                         |              |
| 10             |              | WIRE (FLAT TYPE) (29 CORE)              |              |
| 11             |              | WIRE (FLAT TYPE) (13 CORE)              |              |
| 12             |              | WIRE (FLAT TYPE) (7 CORE)               |              |
| 13             |              | WIRE (FLAT TYPE) (17 CORE)              |              |
| 55             | 1-796-486-41 | DECK, MECHANICAL (CWM43FR16)            | (EXCEPT TH)  |
| 55             | 1-796-486-51 | DECK, MECHANICAL (CWM43FR26) (TH)       |              |
| 57             |              | WIRE (FLAT TYPE) (13 CORE)              |              |
| 106            |              | WIRE (FLAT TYPE) (9 CORE)               |              |
| 108            |              | WIRE (FLAT TYPE) (3 CORE)               |              |
| 110            |              | WIRE (FLAT TYPE) (24 CORE)              |              |
| 253            | 1-693-615-21 | TUNER (FM/AM) (EXCEPT AEP)              |              |
| 253            | 1-693-617-11 | TUNER (AEP)                             |              |
| 254            |              | WIRE (FLAT TYPE) (11 CORE) (EXCEPT AEP) |              |
| 254            |              | WIRE (FLAT TYPE) (15 CORE) (AEP)        |              |
| △ 303          | 1-690-608-11 | CORD, POWER (AEP, AUS)                  |              |
| △ 303          | 1-775-787-11 | CORD, POWER (TH)                        |              |
| △ 303          | 1-775-787-62 | CORD, POWER (E51, EA)                   |              |
| △ 303          | 1-827-226-11 | CORD, POWER (E)                         |              |

| Ref. No.    | Part No.     | Description                             | Remark                     |
|-------------|--------------|-----------------------------------------|----------------------------|
| △ 303       |              | CORD, POWER (SP, MY)                    |                            |
| 509         | 1-776-182-11 | WIRE (FLAT TYPE) (5 CORE)               |                            |
| 653         | 1-824-106-12 | CABLE, FLEXIBLE FLAT (24 CORE)          |                            |
| △ 655       | 1-477-263-11 | OPTICAL TRAVERSE UNIT (DBU-1)           |                            |
| △ F911      | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)   |                            |
| △ F912      | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)   |                            |
| △ F913      | 1-576-655-12 | FUSE, GLASS TUBE (DIA. 5) (T8AL/250V)   |                            |
| △ F914      | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |                            |
| △ F915      | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |                            |
| △ F916      | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |                            |
| △ F917      | 1-533-473-12 | FUSE, GLASS TUBE (DIA. 5) (T6.3AL/250V) |                            |
| △ F918      | 1-533-472-12 | FUSE, GLASS TUBE (DIA. 5) (T5AL/250V)   |                            |
| △ F919      | 1-533-471-11 | FUSE, GLASS TUBE (DIA. 5) (T4AL/250V)   |                            |
| M741        | A-4723-963-A | MOTOR ASSY, TABLE                       |                            |
| M751        | A-4737-533-A | MOTOR ASSY, LOADING                     |                            |
| M961        | 1-763-072-11 | FAN, DC                                 |                            |
| S711        | 1-477-680-11 | ENCODER, ROTARY                         | (DISC TRAY ADDRESS DETECT) |
| △ T911      | 1-443-042-11 | TRANSFORMER, POWER (EXCEPT EA)          |                            |
| △ T911      | 1-443-043-11 | TRANSFORMER, POWER (EA)                 |                            |
| *****       |              |                                         |                            |
| ACCESSORIES |              |                                         |                            |
| *****       |              |                                         |                            |
| △           | 1-569-007-12 | ADAPTOR, CONVERSION 2P (E)              |                            |
| △           | 1-569-008-12 | ADAPTOR, CONVERSION 2P (E51)            |                            |
| △           | 1-569-008-32 | ADAPTOR, CONVERSION (EA, SP, MY)        |                            |

The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

MEMO

## REVISION HISTORY

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